AMERICAN ANNALS

Deaf and Dumb;

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E. M. GALLAUDET [illegible] L. [illegible],
OF NEW YORK [illegible] MICHIGAN,
AND H[illegible]

Executive Committee [illegible] Deaf and Dumb Institution.

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[*Continued on page 2 of cover.*]

AMERICAN ANNALS

OF THE

DEAF AND DUMB.

VOL. XXVII., NO. 1.

JANUARY, 1882.

PRESIDENT GARFIELD'S CONNECTION WITH THE DEAF-MUTE COLLEGE.

BY E. M. GALLAUDET, PH. D., LL. D., WASHINGTON.

IN the tragic event of last summer, which laid a burden of sorrow on the heart of the nation and called for the sympathy of the civilized world, the officers and students of the National Deaf-Mute College had special reasons for grief. The law incorporating the Columbia Institution for the Deaf and Dumb provides that the President of the United States, for the time being, shall *ex-officio* fill the office of Patron. In this capacity he presides at the public anniversaries, and affixes his signature to our collegiate diplomas.

Representing in these acts the Government, which has bestowed most generous benefactions on the Institution, the Patron, whoever he may be, is regarded with special interest and respect by all who here look up to him as their official head.

The decease of the President of the United States, under any circumstances, would consequently be an occasion of mourning at Kendall Green. But in the death of James A. Garfield this Institution loses a friend to whom much of its prosperity and progress is due, and whose open advocacy of its interests in Congress and elsewhere has gone far toward securing for it the position of permanence it now enjoys.

General Garfield's first visit to the Institution was made in the winter of 1865–'66, when the collegiate department had been in operation but a single year. Its students numbered no more than twelve. One of these was a senior pursuing a scientific course, four were freshmen, and the remainder formed a class of still lower grade. The College for Deaf-Mutes was looked

upon at that time as a mere experiment. In many quarters it was spoken of openly with derision. But General Garfield, himself a practical teacher, was warm in his endorsement of the undertaking, and his magnetic encouragement served to inspire both officers and student with a determination that the College *should succeed.*

Maintaining his interest in the progress of the College, General Garfield, in the spring of 1868, showed his confidence in its scholarship by requesting its earliest graduate, Mr. Melville Ballard, to make a translation from the French of an important pamphlet, "*Le Bilan de l'Empire*," in which some very unfavorable criticisms of the financial management of the Second Empire were given to the world.

Some months after the completion of the translation, Mr. Ballard received the following:

"DEAR SIR: Just before I was leaving Washington last summer, I received your very successful translation of '*Le Bilan de l'Empire.*' I should have acknowledged it at once but from the fact that I had to leave the city. My long delay in acknowledging your great kindness can only be accounted for by the recital of a series of accidents and *contretemps*, which I have not now time to recount.

"I take pleasure in forwarding to you a copy of Napoleon's Cæsar (in French) as a slight testimonial of my appreciation of your scholarship and kindness in making the translation.

"With kindest regards, I am, very truly yours,

"J. A. GARFIELD."

This volume was handsomely bound, and Mr. Ballard's name had been stamped on the outside.

During the years 1868–'69, and '70, the progress of the Institution, especially the development of the collegiate department, encountered serious and persistent opposition in Congress. This hostility was so vigorously continued as to jeopardize, on one or two occasions, the very existence of the Institution. General Garfield never failed to give the weight of his influence in favor of continuing the aid of the Government, and on the 21st of June, 1870, when a very important appropriation was under consideration in the House, he made a speech earnestly advocating the liberal support of the Institution in its collegiate character, and urged the propriety of action on the part of Congress, in the following language:

"Nearly every State in the Union has its school for the deaf and dumb, where they are taken through the preliminaries of education, and are elevated from the condition of being irresponsible persons, which is the condition of the uneducated deaf and dumb, for in the eye of the common law they are not held responsible even for murder. They are not considered persons. But by the benevolent institutions of the United States and other countries which have paid attention to this matter, they have been lifted up into the full responsibility of citizenship and the full obligation to obey the laws. Now, here is an institution in the city of Washington that carries the education of the deaf and dumb to the highest point necessary to fit the students who go there to be the teachers of that class. We have here an institution which, according to the laws and regulations now governing it, we have ourselves a part in the work of controlling, which allows students coming from all the deaf and dumb institutions in the various States of the Union, after they have got in those institutions all the advancement they are capable of getting there, to come here and complete the course of study which will fit them to be teachers of the deaf and dumb. The result is that one institution here, as it were in the centre, supplies, or can supply, all the schools for the deaf and dumb in the United States with thoroughly educated teachers, fully qualified for the work; and I know of no single thing which this Congress can do that will have more beneficial results to the whole body of the people than to have one institution officially kept up to supply teachers for the various deaf and dumb institutions throughout the country."

The pending appropriation, which was for the completion of the main central building containing a chapel, lecture-room, refectories, kitchen, etc., was passed by a decided vote, and from that time to the present no serious opposition to the support and development of the Institution has arisen in either house of Congress.

On Sunday, the 29th of January, 1871, the building alluded to above was dedicated to its uses by the President of the United States, after appropriate public exercises. On this occasion General Garfield spoke as the representative of the lower house of Congress, closing his address as follows:

"Several gentlemen have spoken of this movement as a work of charity; in my judgment, it is a work of very enlightened selfishness on the part of Congress. Mr. President, to you is

confided the honor of presiding over the thirty-eight millions of men and women who compose the body of this great Republic. The source of all its greatness lies behind the material evidences of its prosperity, lies in the heads and hearts, the brain, the muscle, and the will of the people over whom you preside. Anything, therefore, that affects their welfare, their force, their efficiency, touches the very essence of the national life. It is well known that only that portion of the population between the ages of twenty and sixty is self-supporting. Of these thirty-eight millions, eighteen millions are outside those limits. In other words, eighteen millions of the population over whom you preside must be supported by the other twenty millions. From these twenty millions must be subtracted the infirm, and all those that for any reason are unable to support themselves. Now the students of this Institution represent more than twenty thousand of the population of the United States, most of whom, by the influence of institutions like this, have been lifted up from the lowest plane of intellectual life to the dignity and value of intelligent citizens. * * *

"One of the best things connected with their education is that they have a lively sense of gratitude to the Government for what it has done for them. These young men cannot fail to become good citizens. They cannot fail to be true to their country, when they remember what it has done for them. I say, therefore, it is enlightened selfishness rather than charity to take this class of our fellow-men, and make them capable of doing a great work for the country. I am happy to send this message to them to-day into their silence. * * *

"The House of Representatives has been proverbial for its economy in regard to expenses of this kind, but I am happy to say that from the beginning of this work the House has stood up nobly and generously to the support of this Institution. And what these students have to-day contributed, and what they are sure to do in the future, will be a most complete vindication of the wisdom of the House, the Senate, and the Executive, united in this great work."

During the following year General Garfield spent part of a day in the College with a party of friends. One who was at that time a student writes of this visit, as follows:

"I do not recollect who any of the gentlemen accompanying him were, but General Garfield's personality and actions impressed themselves upon me with the utmost distinctness. The

classes were assembled at the black-boards, and a couple of hours were spent in an informal endeavor to ascertain, I suppose, the grade of our acquirements. In all this General Garfield led. He went about from rank to rank, questioning and allowing himself to be questioned. There was nothing of the cold examiner about him. He made us feel that he was no merely critical outsider, but a student with us and of us at heart. His blue eyes shone with a scholar's enthusiasm. Of one he asked the history and derivation of the word *dollar;* of myself a like sketch of the word *pariah;* to another he gave an algebraic problem; of still another he asked the nature and use of logarithms.

"Near the close he pointed to a copy of Hamon's Aurora, which represents the goddess standing tiptoe upon a broad leaf in mid-air and drinking from a morning-glory at dawn, and asked a student *why* the artist was justified in portraying a human form standing upon an unsupported leaf."

In the summer of 1872 a measure of great consequence to the Institution was pending before Congress. It was an application for $70,000 to secure the whole of the fine domain known as Kendall Green as the permanent home of the Institution. This measure having been once unfavorably acted upon by the House Committee on Appropriations, of which General Garfield was then chairman, was approved when it came a second time before the Committee, in the shape of a Senate amendment to the sundry civil appropriation bill. And it is safe to say that the appropriation would not have been made but for the favorable attitude of General Garfield.

During the summer of 1874, and in the winter of 1874–'75, General Garfield being still chairman of the Committee on Appropriations, provision was made by Congress for commencing and continuing the construction of the main College building.

An appropriation for the completion of the College edifice was made in March, 1877, and the building was occupied the following winter.

On the public anniversary of 1878, held on the 1st day of May, General Garfield again represented the lower house of Congress, and spoke as follows:

"Mr. President, and Ladies and Gentlemen: Your exercises have been already sufficient for all your desires, I am sure, and I will only detain you to say how much I am gratified to see the completion of this enterprise, which has been struggling up for

so many years, and has reached a point at last where I think almost anybody will rejoice at its further progress. I believe I said on this stage, nine years ago, that nothing impressed me more during the later days of the war, when I first came to this city, than seeing the great marble columns being set up on the east, west, north, and south fronts of yonder Capitol, while the sound of battle was echoing across the Potomac and shaking the very windows of the Executive Mansion. It was a touching exhibition of unshakable faith in the final triumph and permanency of the Union. While fighting with all their might to maintain its existence, the American people were quietly setting up these noble columns as symbols of their faith that there would forever be a great capital of a great nation here, beside the beautiful Potomac; and step by step, as the struggle went on and the restoration of the Union became certain, the determination seemed to be crystalized in the American mind that there should not be another rebellion like it; and as they had strengthened and adorned our marble Capitol, so also they set up new pillars of justice and freedom, the living temple of our liberties, to be its perpetual glory and support. By the same inspiration our work of education, national in its spirit, earnest and determined in its character, has been pursued during the last fifteen years more than in any other period, because our people saw that the safety of the nation required it.

"I am rejoiced to know that this Institution cherishes the ideas I have been trying to set forth. These afflicted young men were only recently regarded as an almost helpless and useless portion of our common humanity. The effort of their country to set them in a place where they should have an equal chance in the race of life is most worthy; and here, first, I believe, on the earth, certainly first in America, the deaf-mutes find an opportunity to enjoy college rights and privileges equal to those enjoyed by others who are not so afflicted. And that is great. It is the great glory of our republic that she has done it; and at a time when it cost something to do it.

"This Institution is one of the three that the United States supports. The one to educate her sons for the Navy, the other for the Army, both of these for the safety of the nation in time of war, and for her safeguard against war; and the third, this Institution, in which the Government reaches out its hand to make you the equal of all her other citizens not afflicted as you are. What is the meaning of all this? The lesson it teaches is

the increased value to Americans of training. That, in my judgment, is the best lesson of our century. We are coming to understand that, whether you want a man for war or for peace—for whatever purpose you need him—a trained man is better than an untrained man. However great your untrained man may be, he would be greater and more efficient if he had been trained. College training is not meant to give you facts, but to teach you how to handle facts when you enter the many-sided life of our country.

"People waste a great deal of time thinking whether they had better study Latin or Greek, or this or that science. I sum up all I have to say on the subject by calling attention to the remark of a distinguished French scholar; when asked if it were necessary to have a knowledge of the ancient languages, he said, 'O, no; it is not necessary to know Latin, but it is necessary to have forgotten it.' That is, either be a man who now knows it, or be one who has forgotten it, but save the training it gave.

"Thanking you, Mr. President, and ladies and gentlemen, for your kind attention to this discursive talk, I bid you good day."

The final visit of General Garfield to the College was on the occasion of our last Presentation exercises, in May of the present year. On that day it was a source of genuine pride and pleasure to all connected with the Institution that we were permitted to welcome a tried and valued friend of many years as our official *head*, for this implied his election by the free choice of his fellow-citizens to the highest office in their gift; and in this humble seat of learning there was further reason for rejoicing that the suffrages of the nation had so honored one whose devotion to letters had been life-long, who was a student and a teacher before he occupied the more elevated but not more ennobling positions of general, lawyer, legislator, and President.

One who was formerly a student in the College, and is now a member of the Faculty, writes of his appearance on that day, as follows:

"He came in half an hour late, being unavoidably detained, the Faculty and specially invited guests of course awaiting his arrival before proceeding to the platform. This circumstance lent a tinge of humility, when he did enter, to the habitual ease and dignity of his manner, and as he passed around the room, exchanging a grasp of the hand and a word with each whom he knew—erect, commanding, buoyant, frank—he seemed to me what indeed he was, the manliest of men. As such he remains,

and forever will remain, in my mind—an exemplar of those noblest characteristics of person, mind, and spirit to which the record of his life now forms an incitement; and as such I am sure he has impressed himself upon very many of my fellow-students."

My personal intercourse with General Garfield on that day was of a character to be remembered with especial pleasure. As we led the procession of officials from the office to the chapel he grasped my arm with the remark: "It does me good to get out among these pleasant scenes, and away from the worry and work over there," pointing towards the Executive Mansion. I replied, "It always does *us* good, Mr. President, to have you with us, but especially on an occasion like this;" and I added, "I have been hoping you might say a few words to our seniors to-day, if it would not prove a burden to you to do so." He responded almost with eagerness, "Not in the least. I always enjoy speaking to young men, and it will be a pleasure to me to address your boys to-day."*

After the exercises were over, as General Garfield, accompanied by his private secretary, Mr. J. Stanley Brown, was returning with me to the College buildings, I remarked that if he was not compelled to hasten back to the city, I should be glad to have him attend the reception that was about being held at my house. "I can stay a little longer, I think," he said; adding, "and I should be sorry not to pay my respects to Mrs. Gallaudet to-day." And so we walked across the green together, and he spent half an hour among our guests, bright and joyous as a care-free boy—meeting many old friends with that freedom and cordiality of manner which was peculiar to him.

On entering he remarked to Mrs. Gallaudet that this was the first social gathering of the sort he had attended since inauguration day. Little did we then dream that it would be the only such occasion he would enjoy while he was President.

Besides the visits of General Garfield to Kendall Green, which may be called official, many connected with the Institution remember with pleasure not a few others of a purely social nature.

One of our graduates recalls one of these incidents, in the following language:

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* President Garfield's admirable address on that occasion was published in the last volume of the *Annals*, (July, 1881,) page 196.—Ed. Annals.

"During the spring of 1872, General Garfield was one afternoon at President Gallaudet's house at dinner. After the meal he seated himself upon the piazza and entered into conversation with some of us students in the most informal manner. We had been studying Bascom's Æsthetics, and for some time the conversation turned upon the nude in Art. I can only recall that he elicited the views of each in the happiest manner, and gave his own, whether of assent or dissent, with delightful ease and geniality."

The same graduate has also the following reminiscence:

"About two years afterwards I was turning over the books at a store in the city when he came in. He seemed fatigued, or very thoughtful. I took up a copy of Philip Gilbert Hamerton's work on the Intellectual Life, then newly published, and asked him if he had read it. 'O, yes,' he replied, 'with very great pleasure,' and his tired air gave place to one of positive vivacity as he proceeded to comment upon those most interesting and suggestive pages."

General Garfield in his visits to Kendall Green was often accompanied by members of his family. Usually, Mrs. Garfield came with him, sometimes some of his children, and on two occasions, at least, his venerable mother. His last visit with Mrs. Garfield was at a meeting of the Literary Society of Washington, held at my house on the evening of Feb. 21st, 1880, when he occupied the chair as President of the Society, and made interesting remarks on the subject under discussion.*

While General Garfield was chairman of the House Committee on Appropriations it often became necessary for me to call upon him, to explain the needs of the Institution, and to give him facts which he might use in advocating our appropriations before the Committee or the House. The friendly interest he manifested in our work on such occasions was most grateful and

* A very interesting meeting of this Society, in memory of its late President, was held Nov. 19, 1881, the fiftieth anniversary of his birth, at the residence of Dr. Gallaudet, Vice-President of the Society. Dr. Gallaudet gave a sketch of General Garfield's connection with the Society; Mr. A. R. Spofford, Librarian of Congress, read a paper analyzing and describing his methods of reading, study, composition, and delivery; Col. Garrick Mallery, of the Smithsonian Bureau of Ethnology, read a paper on his interest in science and his labors in Congress in behalf of the scientific work of the Government; several members spoke of his love for classical studies; and a touching poem was read by Mrs. Frances Hodgson Burnett, author of "That Lass o' Lowrie's."—Ed. Annals.

encouraging. I remember particularly one of these interviews when I called at his house at about the hour he was in the habit of going to the Capitol, and asked if he would not like me to drive him thither in my buggy, allowing me to say some words on business on the way. As I gathered up the reins he noticed the horse, and remarked with a shade of sadness in his voice: "It has long been one of my ambitions to be able to keep a horse and carriage in Washington, but I don't see how I can ever do it." It was only when he became President that this very innocent ambition was gratified. At the conclusion of our ride General Garfield sprang from the buggy to the steps of the Capitol at a single bound, and, reaching back, shook my hand warmly, saying, "Good-bye; we will do the best we can in the Committee and in the House for your College."

During the winter of 1872–'3, when I was spending some months in Europe, I wrote General Garfield, expressing the hope that he would have an especial care over the interests of our Institution in Congress during my absence. His reply was as follows:

"WASHINGTON, D. C., *Jan.* 16, 1873.

"President E. M. GALLAUDET,

"*Château de Belle Rive, Geneva, Switzerland:*

"MY DEAR SIR: Yours of December 28th is just received. It comes to me in the midst of oppressive burdens and at a time when the congressional mind is a prey to unhappy strife and suspicion.* When contrasting our work and surroundings here with your delightful stopping-place in the city of Calvin, it is difficult for me not to be guilty of the sin of envy.

"I do most heartily congratulate Mrs. Gallaudet and yourself that you are away from the heavy cares of your work in the College, and are permitted to enjoy the blessed peace and quiet which your tour in Europe is giving you. The breath of the Alps is health itself. And I hope and believe you will come back to us in due time, with several years added to your life.

"The most of my appropriation bills are already reported to the House, and four have been passed. The Army and Miscellaneous have not yet been taken up. I hope there will be no difficulty when we come to the appropriation for your noble College.

* It will be remembered that it was in the session of 1872–'3 the Credit Mobilier scandal came to light, in connection with which unsuccessful efforts were made to blacken General Garfield's fair fame.

"Mrs. Garfield joins me in kindest regards to Mrs. Gallaudet and yourself.

"Very truly yours,

"J. A. GARFIELD."

During the winter of 1874–'5, General Garfield being still chairman of the Committee on Appropriations, I observed, on two or three occasions when we met, an apparent coldness and lack of interest in our Institution on his part, which disturbed me not a little. I feared I had, inadvertently, done or said something to incur his displeasure, or that some unfriendly tongue had been seeking to alienate him from the College. I did not wait long before addressing him a note, asking if either of the fears above mentioned had any foundation in fact. The following prompt response was, as will readily be believed, most gratifying:

"HOUSE OF REPRESENTATIVES,

"WASHINGTON, D. C., *February* 2, 1875.

"E. M. GALLAUDET, Esq.,

"*President, etc.:*

"MY DEAR SIR: Yours of the 1st instant is received. On reading it I was surprised, and at first a little hurt, that you should suspect me of losing my interest in your Institution or my friendship for you. But on reflection I can see that, jaded and worn and worried as I am by the thousand loads, little and big, that are laid upon my shoulders, it is not remarkable that I should appear less genial and less cordial than was my wont when my burden was lighter. It is loss of vitality, not loss of friendship, and I trust you will pardon any seeming coldness, for it has been seeming only, and I was not aware of it.

"Anxious to do the best I can for your Institution, and still more anxious to retain a friendship which has been so pleasant to me,

"I am, as ever, your friend,

"J. A. GARFIELD."

When the history of General Garfield's connection with the College for Deaf-Mutes is held in review, covering, as it does, a period of fifteen years, and dating back to its very infancy, presenting a record of unfaltering interest and active effort in its behalf—effort in positions where assistance of the most important and material character was given, and interest with the expression of which even the heavy cares of the Presidency of

the Nation did not interfere—it will not be thought inappropriate, I believe, that an effort should be made to secure the erection, on the premises of the College, of some enduring structure or memorial, that shall tell coming generations what our martyred President did for the deaf-mutes of his country. That such an effort is already inaugurated is a source of great satisfaction to those who have felt the magnetism of Garfield's personal presence. That it will be pressed to successful and honorable completion, by the co-operation of all who are directly or indirectly interested in the work of the College, there is no reason to doubt.

ARITHMETIC.

BY D. GREENBERGER,
Principal of the Institution for the Improved Instruction of Deaf-Mutes, New York.

Of all the branches of knowledge which we teach our pupils none is more important than arithmetic. A deaf-mute—or a hearing person—who enters one of the lower walks of life after leaving school may not have any immediate use for his knowledge of history, geography, etc., but I cannot conceive of any circumstances in which he may live and not feel the need of a familiarity with the principles and rules of common arithmetic. Besides, no other branch is better adapted to the development of the reasoning faculties of children than this. It is therefore well worthy of the special attention of instructors.

Arithmetic is a difficult study for deaf-mutes, because it requires a great deal of abstract thinking. The difficulty is augmented by the fact that it has to be commenced at an early stage of the course, when the pupil's vocabulary is quite limited, and he is not able to think in spoken or written language to any great extent. Hence, we cannot strictly follow any of the numerous methods which have been devised for teaching this branch to hearing children, but have to modify these systems to suit the peculiar condition of our pupils.

In this article I propose to give an exposition of the manner in which the subject is treated in the Institution under my charge. A prominent feature of my plan is, that during two, and sometimes three, school years the pupil is taught mental arithmetic only. He learns to solve mental problems in all the fundamental rules before he is made acquainted with any of the

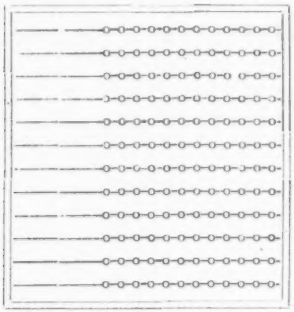
written processes. Throughout the entire course he is not allowed to resort to the use of slate and pencil, when there is any possibility of solving a problem mentally. Though mental arithmetic is difficult for deaf-mutes, yet I have found that it can be carried to considerable extent. I have little fellows who can add mentally 367 and 549, for instance, or tell how much is 7 times 78; $2\frac{1}{2}$ times $\frac{3}{4}$; 5 per cent. of 347, etc., etc.

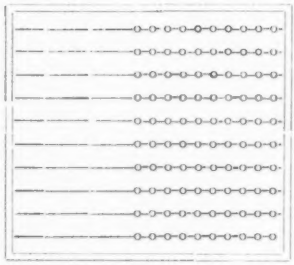
I devote so much time and attention to mental arithmetic because it is more frequently applied in real life than written arithmetic. Pencil and paper are not always conveniently at hand, and the mental processes do not occupy so much time as the written ones. Hence, the former are preferred in business transactions.

Limiting myself to mental exercises in the beginning, I am, of course, compelled to use small numbers only. But I do not consider this a disadvantage. In teaching language to our pupils, we first make them acquainted with such words and phrases as they can immediately employ in their daily intercourse with each other, their teachers, etc. It would be absurd to teach a little child the meaning of difficult words that occur only in books, and with which he will not be likely to meet for years to come, before he has learned to express himself correctly in asking for a piece of bread and butter. It seems to me equally inappropriate to give a little eight-year-old boy or girl sums involving thousands and millions, while as yet he has never had in his possession more than ten cents or seven marbles at any one time, and is not able to form any conception of large numbers. Anything of which a pupil can make practical application in his every-day life will be better remembered than that which he can use in school only. He may have occasion to figure out how many marbles he will get for three cents if he can buy two for one cent, or how much change he will receive if he buys three cents' worth of candy and hands a dime to the storekeeper. But he will not be called upon for many years to make calculations involving thousands and millions. I therefore teach, first, addition, subtraction, division, and multiplication of numbers not larger than ten. Then all these four operations are taught with numbers not exceeding twenty; then the processes are extended to fifty and one hundred.

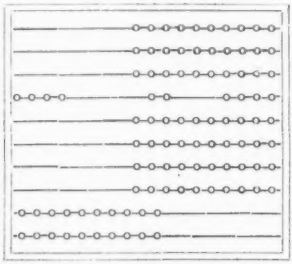
The use of numbers in the abstract is too difficult for beginners. I therefore employ a counting-frame to illustrate the

different operations. There are two kinds of these counting-frames in use in common schools; one with twelve wires and twelve balls on each wire, and the other with ten wires and ten balls to each wire.





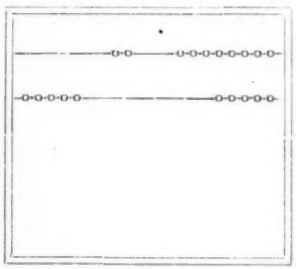
I prefer the latter kind, because it accords with the arrangement of all numbers on the scale of ten, and is better adapted to teach the pupil to perform all operations on that principle. I have seen deaf-mutes who were required to add thirty-four and forty-two, for instance, without the use of pencil or crayon, write these numbers in their hands or in the air, and then proceed as in written addition. I train my pupils so that, when they want to add the two numbers given in this example, they have the counting-frame in their minds arranged as in the following cut. They add the four tens to the three tens, and the four units to the two units:



I begin by teaching the child to count from one to ten, but I do not let him write the figures. He counts the balls on the counting-frame first, then other objects. I ask him to show me two chairs, five crayons, seven books, eight fingers, etc. The reason why I do not teach him to write the figures is, that I aim

at mental arithmetic proper, and therefore wish to prevent him from forming the habit of solving mental problems by writing figures in his hands or in the air.

Next, he learns to add three and two, four and five, six and three, five and two, etc. At first he is allowed to use the counting-frame, but by and by he is required to add these numbers without employing it. When he has learned to do this readily, the questions are varied in the following manner: Three and how many are five? Four and how many are seven? Six and how many are ten? etc. This exercise has a double purpose. In the first place, it prepares the way for subtraction, because "Four from six are two," is only a different form of expressing "Four and how many (two) are six?" In the next place, this mode of dividing a number into two parts finds constant application in the addition of two digits the sum of which is larger than ten. In adding eight and seven, for instance, the pupil is apt to count by ones, thus: Eight, nine, ten, eleven, etc., to fifteen. I do not allow that. I show him on the frame that if I have eight balls on one side of the wire there are two more balls left on the same wire which complete the ten. Knowing that two and (how many?) *five* are seven, he easily understands that I have to take five balls from the next wire to finish the operation. The two and five are each considered as a whole instead of being taken by ones. After some practice this becomes the shortest, and it certainly is the proper way of adding.

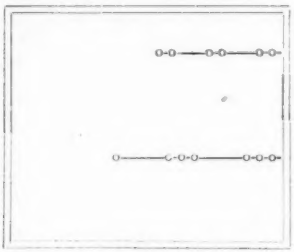


In subtraction I use both formulas, "How many are four from seven?" for instance, and "How many are seven less four?" illustrating them on the counting-frame until the child can subtract readily any two numbers within the range of ten.

In teaching multiplication I first try to make the pupil understand what "three times two" or "twice four," etc., means. I show this to him on the frame, thus:

Eventually the pupil has, of course, to commit the multiplication table to memory, but the idea is to make him understand that multiplication is nothing but short addition, so that if he should forget the table he could find that eight times seven are fifty-six by adding. Though I am speaking here of larger numbers, it must be borne in mind that for the present the pupil learns to multiply within the range of ten only.

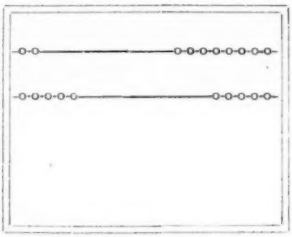
The exercises in division with numbers not exceeding ten consist at first in such questions as, "How many twos are there in six?" "How many threes in seven?" etc. These examples are again illustrated in the usual manner:



Next, the pupils learn to tell how much is one-half of four, one-half of three, one-third of seven, one-fourth of nine, one-third of eight, one-fourth of seven, etc. It must not be supposed that I try to teach fractions to a little child that cannot count higher than ten. But I think it is perfectly proper that he should understand, if, for instance, five apples are to be divided among three boys, we have to give first one whole apple to each, then cut one of the remaining two into three equal parts, giving each boy one of these parts, and do the same with the last apple. I have not found it difficult to make this clear to little children by the use of the counting-frame and other means of illustration, and I consider the exercise a very useful one.

When all these little exercises are thoroughly understood, then we repeat them with numbers to twenty. In teaching addition of these larger numbers care is taken that the pupils always complete the ten, as I previously explained on the example "eight and seven." In subtracting seven from fifteen they are again not permitted to count off one by one, as, fifteen, fourteen, thirteen, etc., till the remainder eight is reached, but are shown on the counting-frame that fifteen is composed of ten and

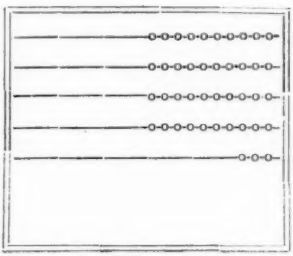
five; each of these two groups to be treated as a whole. After sliding away the five balls in a whole group—not one by one—I ask, "Five and how many are seven?" Then I break the ten, and take away two more. In order to prevent them from counting the remainder, I rapidly cover it with my hand, and, pointing to the two, I ask, "Two and how many are ten?" The process is illustrated in the following cut:



In regard to multiplication and division of numbers to twenty, there is nothing special to mention besides that which has been said about these operations with numbers below ten. When they are well mastered I introduce simple problems, of which the following are examples: A boy had seven marbles, and lost two: how many had he left? John had seventeen cents, and spent five; how much had he left? Henceforward every new lesson is followed by a variety of such practical examples.

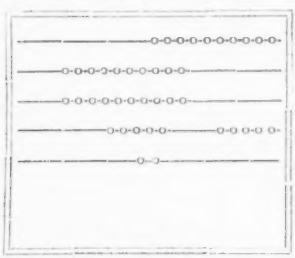
I teach the pupil to count to fifty, and to show readily on the counting-frame thirty-five, twenty-nine, forty-seven, etc. Here the superiority of the ten-ball counting-frame over the one with twelve balls to each wire becomes quite manifest. Seeing thirty-five little globes before him, arranged in three rows of ten each, and the smaller row of five, the idea is impressed upon his mind that numbers are arranged on the scale of tens and units. This is a great gain. He soon learns to recognize numbers on the counting-frame at a glance.

If the frame be placed before him with the balls arranged as shown in this figure, he does not have to count each row, but takes in the four rows of tens and the three units at a single glance, and knows at once that the whole is forty-three.



Next we teach him how to add seventeen and ten, thirty-one and ten, twenty-eight and twenty, etc., calling attention to the fact that in adding these numbers the units remain unchanged. Then we give examples in which the sum of units does not exceed ten, as twenty-five and twelve, thirty-four and fifteen, etc., and at last we let them add numbers with the sum of the units exceeding ten, as twenty-five and seventeen, eighteen and nineteen, etc. The operation is performed with the balls of the counting-frame until the scholars are quite familiar with it; then the frame is laid aside, and the problems have to be solved without it. But as often as the child makes a mistake he is required to take it up again.

Subtraction is also commenced with numbers in which the units remain unchanged; as twenty-one less ten, thirty-seven less twenty, forty-three less thirty, etc. We dwell on examples of this kind till the child can do them without any hesitation. Then we let him subtract numbers in which the units in the minuend exceed those of the subtrahend, as forty-eight less twenty-two, thirty-nine less fifteen, etc.; and at last we introduce examples with the number of units in the minuend smaller than in the subtrahend, as forty-two less twenty-seven. In



this case I show that the two units are taken away first, then the ten is broken to complete the seven units of the subtrahend, and at last the two tens are taken away. I do not introduce the usual expression "borrowing one ten," because for the present there is nothing to be gained by encumbering the mind of the little one with technical expressions. I demonstrate the operation practically before him in the frame; then the latter is put out of sight and he is required to analyze the process verbally, thus: "Forty-two less seven are thirty-five, less twenty are fifteen." I have found that mental subtraction is less rapidly acquired by deaf-mutes than any other part of mental arithmetic; nevertheless they all learn to subtract quite large numbers.

Multiplication of larger numbers is treated in exactly the same manner as that of smaller numbers. The pupils must be able to show readily six times seven balls or seven times six balls on

the frame before they commit the tables to memory. When they know these well, then they have to answer questions like the following: "How many times three are fifteen?" "How many times five are thirty?" "Seven times how many are twenty-eight?" "Six times how many are eighteen?" etc. These questions prepare the pupil for division, for when he has learned to answer them he will be able to tell how many fives there are in thirty: how many threes in fifteen, etc.; or how much is one-fifth of thirty, one-sixth of eighteen, etc.

The introduction of numbers reaching to one hundred presents no particular difficulties. They are treated in the same manner as those below fifty.

Producing several counting-frames, I show what is meant by one hundred and one, one hundred and thirty-nine, two hundred, three hundred, seven hundred, three hundred and fifty-seven, one thousand. I do not express these numbers in figures. The pupil becomes so accustomed to the numeral frame that when he speaks of "five hundred and forty-nine," for instance, he sees before his mind's eye five counting-frames with one hundred little balls each, and a sixth one with the four tens and nine units. I think this is in conformity with the little mute's habit of thinking in plastic forms and pictures.

In teaching how to add three hundred and forty-two and one hundred and twenty-nine, for instance, I show the corresponding number of balls on the frames and have the hundreds added first, then the tens, and at last the units. After illustrating a few examples of this kind the cumbrous use of so many frames becomes superfluous, because the pupil is able to picture them in his imagination.

The subtraction of numbers consisting of hundreds, tens and units is illustrated in the same manner as addition.

The following exercise is prefatory to the instruction in mental multiplication of larger numbers than those included in the common multiplication table:

The pupil is asked to show on the counting-frames three tens, seven tens, fourteen tens, thirty-four tens, etc. Then he is requested to find how many units there are in eight tens, seventeen tens, sixty-five tens, ninety-three tens, etc. When he can do this readily, then we explain to him that three times twenty is equal to three times two tens, which makes six tens, or sixty units; five times thirty equals five times three tens, which is

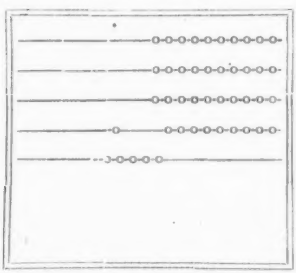
fifteen tens, or one hundred and fifty units; nine times sixty are equivalent to nine times six tens, making fifty-four tens, or five hundred and forty.

To find mentally how many are six times forty-three, for instance, we let the pupil find first that six times forty are two hundred and forty, six times three are eighteen, making together two hundred and fifty-eight. After some practice he will be able to tell how many are seven times sixty-four, four times eighty-seven, eight times forty-nine, six times ninety-seven, etc.

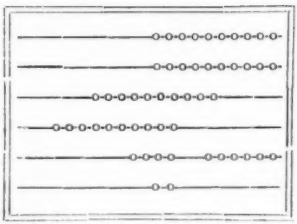
In mental division I have found it necessary not to use such large numbers as in addition, subtraction and multiplication. The examples proposed do not involve numbers larger than two or three hundred. My pupils can tell how many sixes there are in one hundred and twenty-nine; how many sevens in two hundred and forty-seven, etc.; or, how much is one-half of one hundred and forty-three, one-third of one hundred and eighty-nine, etc. They solve these examples by reversing the process of multiplication, knowing that, since three times twenty are sixty, one-third of sixty must be twenty, etc., etc.

When all these various processes of mental arithmetic within the range of one thousand have been thoroughly mastered, the instruction in notation and written arithmetic is commenced.

The written processes are elucidated by means of the pupil's knowledge of mental arithmetic. For instance, the process of "carrying" in addition is illustrated in the following manner: We take a very simple problem, as 39 and 6, and write these numbers on the black-board. Then we show on the frame that in order to add nine units and six units we complete the ten on the fourth wire and add five units on the fifth. The one ten thus completed is added to the three other tens. In a similar manner we show how two or more tens or hundreds are carried. When the process is thoroughly understood in examples with small numbers, then larger numbers are introduced.



"Borrowing" in written subtraction is also illustrated by means of the counting-frame with small numbers; then it is practised with larger ones. Take for example the problem,



"Fifty-two less twenty-six." To subtract six units we first remove the two units on the sixth wire, and then break one ten by removing four more single balls, calling the pupil's attention to the fact that after breaking one ten there are only four tens left from which to subtract the two tens of the subtrahend.

"Carrying" in multiplication and "bringing down" in division are illustrated on the numeral frame in a similar manner, always selecting small numbers for the first examples.

When the pupil has learned to perform the four fundamental operations with numbers reaching to one thousand, then we make him acquainted with the larger numbers. It is not necessary any more to use the counting-frame, for by this time his imagination is sufficiently developed to conceive of ten thousands, hundred thousands, etc., without such illustration.

Next I teach the tables of long, dry, and liquid measures; also those of time and weight. I show one inch, one foot, one yard, and require the pupil to draw a line two inches in length, five inches, two feet, etc. I let him judge the length of the table, the black-board, the room, etc., and then ascertain by actual measurement whether he was correct. I show him the length of one rod, and let him guess at the width of the street expressed in rods, the length of the play-ground, the school-building, the block, etc. I mention some point one mile distant from the school, to give the child an idea of that distance. Then I let him judge the distance of points further removed. I tell him that he can walk a mile in about twenty minutes; that a horse will ordinarily trot a mile in about eight or nine minutes; that a locomotive of a railroad train will run a mile in two or three minutes, etc. Then I ask him what is measured by inches, what by feet, what by yards, etc.

In teaching the tables of dry and liquid measures, I bring a set of these measures before the class; fill a pint measure twice with water, and pour it into the quart measure to show that two pints make one quart. Then I show in the same manner that four quarts make one gallon. I ask, What is measured by the gallon? What do you buy by the quart? What is sold by the barrel, the bushel, the peck? etc.

To explain the table of weights I produce a small pair of scales, with a set of weights, and weigh quantities of salt, flour, etc. Then I let the pupils tell me what is sold by the pound, the ounce, the ton, etc. In one of these lessons I asked a class of pupils how many pounds they thought a strong man could lift, a horse could pull, an adult person weighed, etc. From the incorrect answers that I received I saw how necessary it was to inform them on these subjects. As an illustration, I will mention that a little girl guessed the weight of a stout lady of her acquaintance to be two tons. These discussions, and the information given to the pupils, make the subject interesting, and help to impress the tables upon their minds better than if they are required to commit them to memory, and recite them in a mechanical way.

Now we come to fractions. I first teach the pupil to apply the four fundamental rules to mental problems concerning fractions of small terms, as halves, thirds, fourths, etc., to twelfths. When he can do that well then I take him through a second course, in which fractions with larger terms are introduced and the written processes taught. I have a two-fold reason for proceeding in this way. First, I want the pupil to become accustomed not to resort to writing if there is any possibility of solving a problem mentally. Second, the mental processes with fractions of small denominations can be easily illustrated and explained. They help the pupil to understand the more difficult processes.

The first lessons on common fractions are conducted after the following plan:

The teacher draws a straight line on the black-board and divides it into two equal parts. She asks the pupil, "Into how many parts have I divided this straight line? Are the parts equal? What is each part called?" (One-half.) Another straight line is drawn and divided into two parts that are *not* equal. Then the same questions are put with regard to the division of this line, and the pupil is told that the unequal parts are not called halves.

Teacher to pupil. Draw another straight line. Divide it

into two equal parts. Sub-divide each part into two equal parts.

Into how many parts is this line now divided? What is this part (pointing to the first) called? What is this part (pointing to the second or third or fourth) called? What is each part called? What are these two parts called? Three parts? Four parts?

In order to divide this line into fourths it is well to ask the pupil to divide it first into halves, and then subdivide each half. He will be able to divide more accurately in this way than if he attempted to point off at once one-fourth. He will also get the idea that one-half equals two-fourths.

Teacher. Draw a straight line and divide it into two halves. Subdivide each half into fourths. Divide each fourth into two equal parts. Into how many parts is this line now divided? (Eight parts.)

What is each part called? (One-eighth.) Show me two-eighths, three-eighths, five-eighths, etc.

Divide a straight line into three equal parts. What is each part called? Show me two-thirds. Divide a straight line into three parts that are not equal. Ask if any of these points is called one-third.

Divide a straight line into halves. Subdivide each half into three equal parts. Into how many parts is this whole line now divided? What is each part called? Show me two-sixths, three-sixths, five-sixths, etc.

It is well to show the pupils that we can also divide a line into sixths by first dividing it into thirds and dividing each third into two equal parts. In teaching the meaning of one-twelfth I show that we can obtain this fraction by dividing a line into fourths and then dividing each fourth into three equal parts, or by dividing it first into thirds, then into sixths, and subdividing each sixth into two equal parts, etc.

In a similar manner we illustrate fifths, sevenths, ninths, and tenths.

Though for the present the object is to teach the pupil to perform all four operations mentally only, yet it will be well to

show him at once how these fractions are expressed in figures.

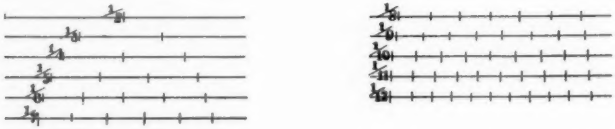
How many halves in a unit? How many thirds, fourths, fifths, sixths, sevenths, etc., in one unit?

Draw lines and show me $\frac{3}{8}$, $\frac{4}{5}$, $\frac{1}{6}$, $\frac{3}{8}$, $\frac{4}{9}$, $\frac{5}{12}$, $\frac{2}{7}$, $\frac{7}{16}$, etc.

Show me one-half of the black-board, one-third of the black-board, etc. Show me one-half of the room, one-fourth of it, etc. One-half of this class, one-fourth, one-sixth, etc., of it.

How many inches make one foot? How many inches in half a foot? In one-third, one-fourth, one-sixth of a foot? What part of one foot is an inch? What part are six inches? Four inches? Eight inches? Similar questions should be asked with regard to pounds and ounces, weeks and days, years and months, etc.

Draw the following diagram to illustrate the relative value of fractions:



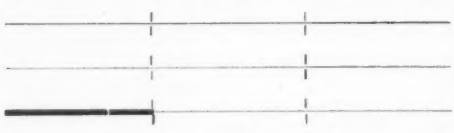
Which is larger, $\frac{1}{2}$ or $\frac{1}{3}$? $\frac{1}{3}$ or $\frac{1}{4}$? $\frac{1}{4}$ or $\frac{1}{8}$? $\frac{5}{6}$ or 1? $\frac{3}{4}$ or 1?

Draw lines and show me $\frac{5}{4}$, $\frac{7}{3}$, $\frac{8}{6}$, $\frac{14}{4}$, $\frac{19}{2}$, etc.

For the present I do not introduce the terms proper fraction, improper fraction, mixed numbers, etc. I make the pupil understand that $\frac{3}{4}$ are less and $\frac{5}{4}$ are greater than 1, without encumbering his memory with names and definitions.

How many units in $\frac{6}{3}$, $\frac{12}{4}$, $\frac{8}{2}$, $\frac{15}{5}$, $\frac{3}{3}$, $\frac{9}{4}$, $\frac{17}{3}$, $\frac{13}{6}$, $\frac{23}{4}$, etc.

The pupil finds no difficulty in answering the questions after seeing the fractions represented by lines on the black-board. If, for instance, he has the following diagram before him, he

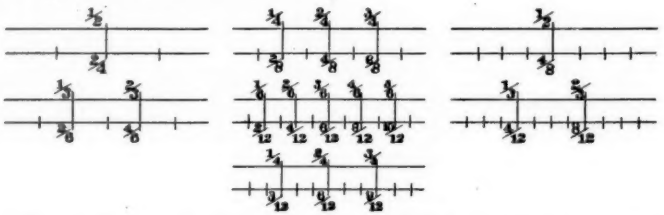


sees at a glance that $\frac{7}{3}$ are equal to $2\frac{1}{3}$. He soon discovers that he has to divide the numerator by the denominator in order to reduce an improper fraction to a mixed number. If a child deduces a rule for himself in this manner, he will remember it better than if it is explained to him and he is compelled to commit it to memory.

We now reverse the foregoing questions and ask: How many

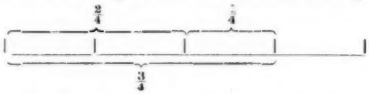
fourths in $3\frac{1}{4}$? How many thirds in $3\frac{1}{3}$? How many sixths in $5\frac{1}{6}$?

The following diagram illustrates the reduction of fractions to higher or lower terms:



In similar manner we illustrate that $\frac{1}{5}$ equals $\frac{2}{10}$, etc., and dwell on this exercise till the pupil can tell, without resorting to the diagram, how many thirds there are in $\frac{8}{12}$, how many fourths in $\frac{6}{8}$, how many tenths in $\frac{1}{2}$, etc.

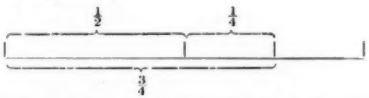
We now proceed to the addition of fractions, taking first two fractions of a common denomination, as two-fourths and one-fourth. Usually the pupils add two-fourths and one-fourth as readily as they would add two apples and one apple. If they do not, we illustrate the process in the following manner:



How many are $\frac{3}{8}$ and $\frac{2}{8}$? $\frac{5}{8}$ and $\frac{2}{8}$? $\frac{3}{7}$ and $\frac{2}{7}$? $\frac{7}{10}$ and $\frac{6}{10}$? $\frac{5}{12}$ and $\frac{9}{12}$? $\frac{7}{8}$ and $\frac{5}{8}$? $2\frac{1}{4}$ and $3\frac{2}{4}$? $7\frac{5}{8}$ and $3\frac{7}{8}$?

Next we take two fractions, one of which can be changed to the denomination of the other.

How many are $\frac{1}{2}$ and $\frac{1}{4}$?



After seeing a few illustrations like the foregoing, the pupil will be able to add $\frac{3}{4}$ and $\frac{5}{8}$, $\frac{4}{5}$ and $\frac{9}{10}$, $\frac{2}{3}$ and $\frac{5}{6}$, $24\frac{1}{2}$ and $31\frac{3}{4}$, $17\frac{1}{3}$ and $59\frac{5}{6}$, etc.

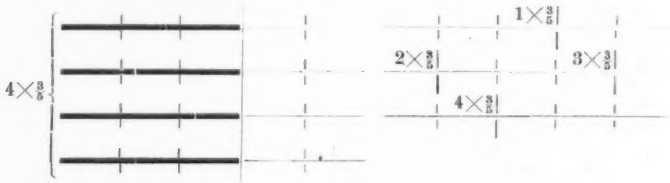
How many are $\frac{1}{2}$ and $\frac{1}{3}$?

In this case it is necessary that the teacher suggest to the pupils that the fractions can be changed to sixths. After some practice they will be able to decide themselves to what denomination the fractions can be changed, provided, of course, that we take small terms only, as halves, thirds, fourths, eighths, etc.

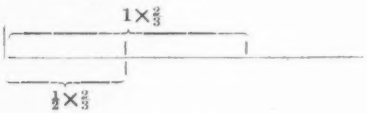
Subtraction of fractions is illustrated in exactly the same manner as addition, taking first two fractions with common denominators, then two fractions, one of which can be changed to the denominator of the other, etc.

How many are three times $\frac{2}{3}$?

How many are four times $\frac{3}{5}$?

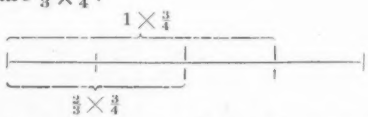


How many are $\frac{1}{2} \times \frac{2}{3}$?



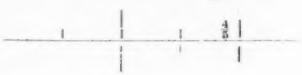
One-half of $\frac{2}{3}$ is $\frac{1}{3}$.

How many are $\frac{2}{3} \times \frac{3}{4}$?

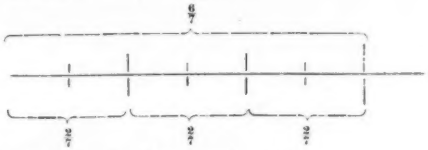


It is easily to be seen from this illustration that $\frac{2}{3}$ of $\frac{3}{4}$ are $\frac{2}{4}$ or $\frac{1}{2}$. We give a number of similar problems which can easily be illustrated by means of the straight lines and which the pupil is required to solve mentally.

How many are $\frac{4}{5} \div 2$? The pupil is required to point off $\frac{4}{5}$ of a straight line and divide it into two parts.

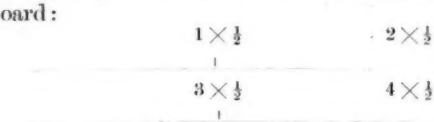


$\frac{6}{7} \div 3 = \frac{6}{7}$ divided into three parts:

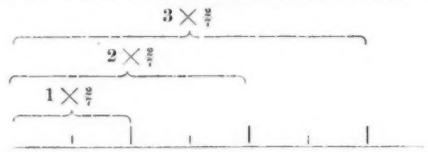


$\frac{1}{2} \div 4 = \frac{1}{2}$ divided into four parts $= \frac{1}{8}$.

$2 \div \frac{1}{2}$. To aid the learner in solving this problem we ask him, How many times is $\frac{1}{2}$ contained in 2? and draw the following on the black-board:



How many are $\frac{6}{7} \div \frac{2}{7}$? It is likely that this question will be readily answered. If it is not, we reverse it and ask, How many times $\frac{2}{7}$ make $\frac{6}{7}$? which can be illustrated as follows:



Divide $\frac{3}{4}$ by $\frac{2}{3}$. I suggest to reduce both fractions to twelfths; then we have $\frac{9}{12} \div \frac{8}{12} = 9 \div 8 = 1\frac{1}{8}$.

The pupil having thus learned to perform mentally all the four operations with fractions of small terms, we now go over the same ground again and teach him all these written processes with fractions of larger denomination. During this second course in fractions we may employ some elementary arithmetic that is used in schools for hearing children. For, by this time, the pupil has probably been five or six years in the Institution, and is sufficiently advanced in language to be able to use ordinary text-books.

The study of decimal fractions from a text-book is preceded by the following mental exercises:

How many are $10 \times 1 = ?$ $10 \times 10 = ?$ $10 \times 100 = ?$ $10 \times 1{,}000 = ?$ $10 \times 10{,}000 = ?$ $10 \times 100{,}000 = ?$

How many are $10 \times 2 = ?$ $10 \times 20 = ?$ $10 \times 200 = ?$ $10 \times 2{,}000 = ?$ $10 \times 20{,}000 = ?$ $10 \times 200{,}000 = ?$

How many are $10 \times 5 = ?$ $10 \times 50 = ?$ $10 \times 500 = ?$ $10 \times 8 = ?$ $10 \times 80 = ?$ $10 \times 87 = ?$ 100×311? etc.

How much is one-tenth of 1,000,000? Of 100,000? Of 10,000? Of 1,000? Of 100? Of 10?

How much is one-tenth of 400? Of 7,000? Of 850? Of 843? etc.

How much is one-tenth of 1? Of $\frac{1}{10}$? Of $\frac{1}{100}$? Of $\frac{1}{1000}$?

How much is one-tenth of 3? Of $\frac{3}{10}$? Of $\frac{3}{100}$? Of $\frac{3}{1000}$?

Which is larger, 20 or 200?

How many times as large as 20 is 200? 2,000? 20,000?

What part of 200 is 20? What part of 2,000 is 20? What part of 20,000 is 20?

30 is $\frac{1}{10}$ of what number? 51 is $\frac{1}{10}$ of what number? 841 is $\frac{1}{10}$ of what number?

Which is larger, $\frac{1}{10}$ or $\frac{1}{100}$?

How many times as large as $\frac{1}{100}$ is $\frac{1}{10}$?

How many times as large as $\frac{1}{1000}$ is $\frac{1}{10}$?

What part of $\frac{3}{10}$ are $\frac{3}{100}$?

What part of $\frac{3}{10}$ are $\frac{3}{1000}$?

How many hundredths in $\frac{1}{10}$? In $\frac{3}{10}$? In $\frac{7}{10}$?

How many thousandths in $\frac{1}{10}$? In $\frac{4}{10}$? In $\frac{9}{10}$?

How many tenths in thirty-four hundredths? In one hundred and twenty-seven thousandths?

How many hundredths in one hundred and twenty-seven thousandths?

In teaching percentage and interest, ratio and proportion, square and cube roots, etc., I follow an ordinary text-book without any modification.

THE DIGNITY AND RELIGIOUS DEVELOPMENT OF THE LANGUAGE OF PANTOMIME.*

BY THE REV. FRANCIS J. CLERC, D. D., RECTOR OF ST. PAUL'S CHURCH, PHILIPSBURG, PA.

Παντόμιμος,–ον, *Omnium personarum imitator effictorque, omnis generis gestus exprimens.*

My subject is *Pantomime*, or, following the definition given by Hederich of the Greek word for one who uses it, "the expression by gestures of every kind," of the conduct, feelings, motives, and character of other persons.

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*Read at the First Conference of Church Workers among Deaf-Mutes, New York, Oct. 6, 1881.

Conduct must first appear in the *action* of the pantomimist, because conduct is visible, tangible, and may be imitated and portrayed, so as to be perceptible and intelligible to every intelligent observer. But conduct springs from some inner thought or feeling, and corresponds thereto whenever it is not violently or purposely controlled in other directions. To depict the simple, unrestrained behavior of any animal, or of a child, is ordinarily to disclose the forces which are at work within, and to exhibit him accordingly. To exhibit the real motives or thoughts or feelings which one is endeavoring to disguise or to conceal under the semblance of any unreal purpose, and so to paint his character, is, of course, to display the most accurate and thorough knowledge of human nature; the most subtle analysis of the process of thought and feeling; the most desperate wickedness of the human heart; or, it may be, the most generous and exalted qualities of which a human being may be possessed.

Thus it may appear that the language of pantomime may extend through every degree of perfection, from the rude and uncouth imitation of the simplest natural movements of the body of an animal or of a human being, up to the sublimest actions which thought or passion, impulse or principle, can prompt. There may be expressions in pantomime that shall equal the most renowned sayings of the most eloquent orators, or the actions of the most exalted saints. In fact, there is no truer presentation of the Gospel of our Lord and Saviour Jesus Christ than that which is given in the familiar but faithful recitation of the Creed. And, descending from the elevation of sacred themes, I venture to say that the sublimity of the famous *mot* of Corneille, "*Qu'il mourût*," is equalled if not excelled by the scene of the elder Gallaudet baring his breast to an infuriated and threatening pupil.

From what has been briefly suggested, it follows, *first*, that *Pantomime is a language.* Though there be no sound, yet its voice is heard; and my first suggestion is founded on this: *that the deaf and mute be very slow to abandon or neglect that language.*

I observe the tendency among those most highly educated or cultured to maintain in conversation or recitation or public action as passionless and unmoved an expression of face and features as possible, and to restrict action to the gentlest and

most quiet and least apparent motions. And doubtless there is reason for some repression in respect of the action of many mutes. But I submit that it will not be wise to adopt as the standard of polite behavior for mutes that which would be deemed such in circles of hearing and speaking persons, or to condemn as unseemly for mutes that which might be criticized or condemned as unnecessary elsewhere. If *emphasis* for or against any thought or sentiment or action be required, the *speaking tongue* can give it and the *hearing ear* can comprehend it in various ways which the *eye* cannot detect; and for purposes of similar emphasis the deaf-mute, however cultivated or intelligent, must be allowed the only expression which remains for him in the manifested force or vigor of his *action*. My father used to recall, with pleased expression, the heartiness of his own pantomime as he gave answer in his marriage vow to the promise of faithfulness, love, and duty to his bride, in contrast (as he tried to assume) to the grace and beauty and modesty of her reverence and courtesy. The incident may illustrate the propriety of greater freedom and decision in pantomime on the part of some as compared with others, or of any one at some times rather than at others. And I beg to insist on the merits of the natural language of signs or pantomime as too high and valuable a medium of instruction and of communication, of influence, and of power over the minds of others, to be allowed to droop or grow feeble by neglect or disuse.

Doubtless, in our schools, the main purpose with teachers must be to impart a thorough knowledge of the *English language;* but the power of each teacher depends in great measure, I think, on his own pantomimic power, and the success or the influence of each pupil will, I think, depend on his ability to grasp the correspondence of the two languages and to note their divergences. Many of the blemishes of the Revised New Testament are the attempt to make the English words follow the Greek order; and the effect is painful and injurious. Similarly the natural order of signs is often the reverse of the artificial English order; and the dignity of the pantomime as a language seems to me exalted by the fact that it is conformed more often to the earlier, but fuller and richer, forms of Greek and Latin than to the derived and diluted forms of modern languages.

Without enlarging or insisting longer on this thought, let me

make my second declaration and suggestion. *Second: Pantomime* (like any other language) *is susceptible of improvement.* And the suggestion is offered *that its culture be prosecuted by the development of its religious form.*

There is little danger that literary or scientific improvements in pantomime, *i. e.*, the expression of the ideas or of the truths of literature and of science, will be neglected. Our schools are too numerous and well-managed, our pupils are too well instructed, and the progress which they are making in the world after they leave the schools is too marked to allow room for fears of decadence in those respects. But I submit that for the due and right expression of revealed truth, of the doctrinal points of the Christian faith, the deaf-mute community all over the world is dependent on the same formulæ (*e. g.*, in the Creed, the words ὑμοούσιος, *hell, resurrection, catholic, Church;* in the sacred Scriptures, *regeneration,* ὁ Λόγος; in Theology, *Trinity, incarnation, redemption*;) which have preserved them for the hearing and speaking persons in the successive generations of mankind, and that it is essential to the preaching of the Gospel among the mutes that there should be correct and approved pantomimic expressions of those high and deep and sublime truths which it has pleased God to reveal unto mankind.

The very power and simplicity of the universal language of pantomime have made it a powerful element of the religious education of *all* Christians, and the utmost skill and knowledge and devotion of Christians well taught in all the doctrines of the Christian faith should, I think, be employed in the endeavor to formulate even the mysteries of our holy religion in such wise as to return to the *deaf-mutes, in their own mother tongue,* the full and exact science of Theology. Not that they must all become theologians; but that they may have the Word and Sacraments of God, the truths and doctrines and precepts and examples of God correctly presented unto them in compact form and in forcible manner, in a language which is "understanded of them" as a people.

In this respect it seems to me that the value and importance of the Church's work among deaf-mutes cannot be overrated. Its beneficent and educating influences, its alms and blessings, are manifest enough; but by as much as the soul is more than the body, the life more than meat, and the body than raiment, by so much, I submit, is the religious instruction of the Mission nobler and

higher and better than its alms-deeds. Both are joined together as charity; neither could continue without the other; and what God has thus made one no man may sever.

May the Divine blessing continue to favor and prosper the noble endeavors of those who have begun and prosecuted this wonderful Mission.

TABULAR STATEMENT OF THE INSTITUTIONS OF THE DEAF AND DUMB OF THE WORLD.

BY THE EDITOR.

For some time past we have been endeavoring to obtain material for a complete list of the institutions for the deaf and dumb of the world, with some of the most important statistics concerning each institution. Nothing of the kind, we believe, has been attempted since Dr. H. P. Peet's "Statistical View," published in 1852, in the thirty-third report of the New York Institution. Since that time the number of institutions has greatly increased, and there have been many important changes.

We are under obligation to the Department of State of our Government and to its representatives abroad for much assistance in obtaining the statistics of foreign schools. Our thanks are also due to many officers of institutions. As a copy of this Tabular Statement will be sent to each institution, we trust the friends who have aided us will feel somewhat repaid for their trouble by the interest and value of the information returned. We do not venture to hope that the Statement is entirely free from error; but we trust it may be the means of enabling us to publish fuller and more accurate statistics at some future time. Any one discovering errors or omissions will greatly oblige us by informing us of the fact.

One of the most interesting items of information is that relating to the methods of instruction now prevailing. There is so much variety among these, however, that it is not easy to present them accurately in the narrow limits of a statistical table. The best we are able to do is to group them into four classes—*manual*, *oral*, *combined*, and *transition*.

By the *manual* method is meant the course of instruction which employs the sign-language, the manual alphabet, and writing as the chief means in the education of the deaf, and has

facility in the comprehension and use of written language as its principal object. The degree of relative importance given to these three means varies in different schools; but it is a difference only of degree, and the end aimed at is the same in all. If the pupils have some power of speech before coming to school, or if they possess a considerable degree of hearing, their teachers usually try to improve their utterance by practice; but no special teachers are employed for this purpose, and comparatively little attention is given to articulation.

By the *oral* method is meant that in which signs are used as little as possible; the manual alphabet is generally discarded altogether; and articulation and lip-reading, together with writing, are made the chief means as well as the end of instruction. Here, too, there is a difference in different schools in the extent to which the use of signs is allowed in the early part of the course; but it is a difference only of degree, and the end aimed at is the same in all.

The *combined* method is not so easy to define, as the term is employed with reference to several distinct methods, such as (1) the free use of both signs and articulation, with the same pupils and by the same teachers, throughout the course of instruction; (2) the general instruction of all the pupils by means of the manual method, with the special training of a part of them in articulation and lip-reading as an accomplishment; (3) the instruction of some pupils by the manual method and others by the oral method in the same institution; (4)—though this is rather a combined *system*—the employment of the manual method and the oral method in separate schools under the same general management, pupils being sent to one establishment or the other as seems best with regard to each individual case. In this Tabular Statement it is impracticable to distinguish between the first three sub-classes of the combined method; where the fourth prevails the two establishments are designated separately.

Some institutions which formerly followed the manual or the combined method have decided within the last two years to adopt the oral. In accordance with the recommendation of the Milan Convention, however, the old course of instruction is continued with the pupils whose education was begun before the change was decided upon, while the oral system is pursued with the new pupils. The method of such institutions is designated in the Tabular Statement as *transition*.

Tabular Statement of the Institutions of the World.

AUSTRALIA.—1879.

Location.	Date of Establishment.	Principal.	No. of Pupils.		No. of Teachers.	Method of Instruction.	How Supported.
			Male.	Female.			
Sidney, New South Wales	1860	Samuel Watson	28	25	4		Voluntary contributions and pay pupils.
Melbourne, Victoria	1860	Frederick J. Rose	46	34	5		Do. do.
Adelaide, South Australia	1874	James Hogg					Do. do.
Three Institutions in Australia			74	59	9		

AUSTRIA-HUNGARY.—1878.

Vienna	1779	Alexander Venus	81	36	7	Oral	Endowment, State, and pay pupils.
St. Pölten	1846	Johann Hollrigel	29	20	4	do	Endowment, State, and vol'y contrib'ns.
Linz	1813	Johann Brandstätter	38	42	5	do	Endowment, State, and religious and school funds.
Klagenfurt	1849	Ritt. V. Gallenstein	15	7	3	do	Endowment and voluntary contributions.
Görz	1840	Pauletie	63	36	7	do	Provinces of Görz and Istria.
Hall, (Tyrol)	1830	I. Zampredri	20	16	4	do	Endowment and pay pupils.
Trent	1843	P'te Dom Amech	16	22	3	do	Vol. contrib'ns and per cent. on legacies.
Prague	1786	Hemet	86	49	14	do	Endowm't, vol. contrib's, and pay puplis.
Brünn	1852	Ed. Partisch	69	54	4	do	Endowment and province.
Lemberg	1830	Ceslaus Pogonowsky	42	28	4	do	Endowment, voluntary contributions, and pay pupils.
Graz	1831	M. Fyringer	49	37	5	do	Endowment and province.
Leitmeritz	1867	G. Ant. Demuth	22	8		do	Province and pay pupils.
Budweis	1859	M. Sedlak	38	46		do	Endowment and voluntary contributions.
Vienna, (Hebrew)	1844	J. Deutsch	66	41		do	Full payment by wealthy pupils and less by poor.
Hürteldorf, (near Vienna)	1870	A. Lehfeld	12	4		do	Pay pupils.
Waizen, (Hungary)	1802	Mr Feköti				do	Endowment and voluntary contrib'ns.
Budapest, (Hungary)	1876	Leopold Grünberger	37, sex not rep'd			do	Endowment, State, and pay pupils.
Seventeen Institutions in Austria-Hungary			646	446	60		

BELGIUM.—1879.

Antwerp	1835	Society of Family Fathers	46	None.	.....	Oral	Government, province, voluntary contributions, and pay pupils.
Brussels	1835	Sisters of Charity	None.	112	.....	Combined	Do. do.
Woleuve St. Lambert	1835	Brothers of Charity	99	None.	.....	Oral	Do. do.
Ghent	1822	....do....	50	None.	.....	....do....	Do. do.
Ghent	1822	Sisters of Charity	None.	54	.....	Transition	Do. do.
Bruges	1836	....do....	75	62	.....	Combined	Do. do.
Liege	1830	Lay Committee	143	100	.....	....do....	Do. do.
Maeseyck	1844	Brothers of Pity	19	None.	.....	....do....	Do. do.
Maeseyck	1840	Sisters of Charity	None.	14	.....	....do....	Do. do.
Namur	1840	Mme. V. Jourdin; Abbé Ed. Rieffel	50	40	.....	Oral	Do. do.
Ten Institutions in Belgium			482	382			

BRAZIL.—1879.

Rio de Janeiro	1867	Tobias R. Leite	32	None.	3		State, province, and pay pupils.

DENMARK.—1880.

Copenhagen (Royal Institution)	1807	Rev. R M. Hansen	72	70	15	Manual	State, towns, and pay-pupils.
Do. ....(School)	1850	John Keller	77	67	19	Oral	Do.
Do. ....(Institute for children of the higher classes)	1871	J. Keller and Miss C. A. Mathison	1	5	4	....do....	Pay pupils.
Do. ....(Home for adult girls)	1869		None.	34	3		Voluntary contributions and pay pupils.
Four Institutions in Denmark			150	176	41		

FRANCE.—1880.

Paris	1765	Dr. Peyron	250	None.	24	Transition	State, departments, and pay pupils.
Angers	1777	Sœur Felicité Charnaci	20	24	.....	Combined	Department, voluntary contributions and pay pupils.

Tabular Statement of the Institutions of the World—Continued.

FRANCE—Continued.

Location.	Date of Establishment.	Principal.	No. of Pupils.		No. of Teachers.	Method of Instruction.	How Supported.
			Male.	Female.			
Bordeaux	1783	Gustave Huriot	None.	200	24	Transition	State, departments, and pay pupils.
Nogent-le-Rotrou*	1808	Abbé Lebouc	13	12			
Auray*	1812	M'lle Teissier	37	22			
Rhodez*	1814	Abbé Roquette	18	19			
St. Etienne	1815	Frère Virmin	69	None.		Combined.	
Caen	1816	Aug. Cavé	39	40	16	Transition	Voluntary contributions and pay pupils.
Pas-de-Calais*	1817	M'lle Teissier	37	22			
Le Puy	1818	Frère Marie-Tierre	55	26	9	Combined.	Do. do.
Besançon*	1819	Sœur Marie Chauvigny	None.	35			
Bouches-du-Rhone*	1819	Abbé Dassy	39	19			
Lyons	1824	Claudius Forestier	50	40	9	Manual	Department, towns, and pay pupils.
Besançon*	1825	Frère Odelité	32	None.			
Toulouse*	1826	Abbé Catala	44	31			
Clermont*	1827	Sœur Beatrix	None.	22			
Nancy*	1828	Mr. Piroux	67	48			Department, voluntary contributions, and pay pupils.
St. Etienne	1828	Mme. Rolland	None.	108	18	Combined	Voluntary contributions and pay pupils.
Laval	1830	Sœur Augustine	43	48	8	do	Departments.
Albi	1832	Sœur Massol	29	30	13	Manual	Department, voluntary contributions, and pay pupils.
Haumont*	1833	Abbé Dessaigné	23	4			
Ronchin-Lille	1834	Mr. Mesmin	95	None.	9	Transition	Department towns, and pay pupils.
Fives*	1835	Sœur Ste. Synclétique	None.	40			
Orléans*	1835	Mme. Othilde	None.	41			
Rouen*	1835	M'lle Lefebvre	23	19			
Pont-l'Abbé	1838	Abbé Ecroun	26	20	9	Transition	Department and voluntary contributions.
Poitiers	1838	Frère Médéric	94	None.	10	Transition	Department, towns, and pay pupils.
Vizille*	1838	M'lle M. Lentillon	None.	23			
St. Brieuc*	1838	Abbé Leboucq	13	12			
Orléans	1839	Frère Joachim-Mie	52	None.	6	Combined	Department, towns, voluntary contributions, and pay pupils.

Saint-Médard-les-Soissons	1840	Chanoine Bourse	90	88	20	Oral	Department, towns, and pay pupils.
Grenoble*	1840	Mr. Rauh	12	None.			
Chambéry	1841	Abbé Philibert Jouty	64	30	11	Manual	State and departments.
Vaujours*	1843	Mr. Bidron	6	None.	1	do	
Déols	1846		None.	8	1		
Aurillac*	1846	Mme. Cavaillac	7	7			
Fougères	1846	Sœur Marie-Angèle	6	20			
Brou	1847	Abbé Convert	None.	40	5	Oral	Department and pay pupils.
Larnay*	1847	Mme. de Saint Emery	None.	55			
Fontainebleau*	1848	M'lle Drouville	None.	5	1		
Montpelier*	1850	Sœur Faure	14	26			
Alençon*	1852	Abbé Lebecq	18	18			
Avignon*	1853	Sœur Sainte-Gertrude	None.	8	1		
Cahors*	1854	Sœur Marie-Bernard	None.	15			
Paris	1854	Auguste Houdin	10	10	5	Oral	State, department, and pay pupils.
Bourg	1856	Abbé J. M. J. Goyottou	30	None.	4	Transition	Departments and pay pupils.
St. Hippolyte-du-Fort	1856	Rev E. Rayroux	23	28	6	Oral	Department and voluntary contributions.
Nantes	1856	Frère Louis	70	None.	8	Transition	Department and pay pupils.
Gap*	1856	Sœur Theodosie	None.	10	1		
Embrun*	1856	M'lle Guien	6	2	1		
Bas-la-Reine*	1861	Sœur Eléonore Cassagne	None.	25			
Moingt*	1864	Abbé Dessaignes	None.	7	1		
Veyre*	1866	Abbé Rieffeld	None.	6	1		
Saint-Laurent-du-Pont	1870	Frère Paul	40	None.	5	Transition	Voluntary contributions.
Bordeaux	1870	Abbé Gaussens	52	None.	5	Combined	Voluntary contributions
Alger	1872	Gilbert Chargebœuf	5	5	2	Manual	Department and city.
Lyons	1872	J. Hugentobler	5	5	2	Oral	Pay pupils.
Clermont-Ferrand	1873	Frère Jacques	31	None.	4	do	Department and pay pupils.
Paris		Mr. Magnat				do	
Villeneuve-les-Avignon		Abbé Grimaud					
Sixty Institutions in France			1,656	1,301	†240		

GERMANY.—1881.

PRUSSIA.							
EAST PRUSSIA.							
Königsberg	1817	Gotsch	85		10	Oral	Province.
Königsberg	1873	Schön	108		10	do	Private.

* Concerning this Institution our latest information is the Report of Mr. Valade-Gabel published in 1875. † Number in 36 Institutions containing 2,003 pupils.

Tabular Statement of the Institutions of the World—Continued.

GERMANY—Continued.

Location.	Date of Establishment.	Principal.	No. of Pupils.	No. of Teachers.	Method of Instruction.	How Supported.
PRUSSIA.						
EAST PRUSSIA—Continued.						
Braunsberg	1844	Heinick	77	5	Oral	Province.
Angerburg	1833	Stockmann	128	8	do	Do.
Tilsit	1881	Richter	13	1	do	Province and city.
WEST PRUSSIA.						
Marienburg	1833	Hollenweger	117	7	do	Province.
Elbing	1870	Wendt	34	2	do	Private.
Schlochau	18,3	Eimert	72	4	do	Province.
Graudenz	1876	Radomski	53	5	do	Do.
Danzig	1881	Hahn	30	3	do	Do.
Oliva	1881	Spohn	27	3	do	
BRANDENBURG.						
Berlin	1788	Dr. Treibel	84	12	do	State.
Berlin	1875	Dr. Berndt	136	13	do	City.
Wriezen	1881	Walther	33	5	do	Province.
POMERANIA.						
Stettin	1839	Erdmann	96	8	do	Do.
Cöslin	1861	Oltersdort	89	6	do	Do.
Bütow	1865	Nöske	19	2	do	Do.
Laurenburg	1867	Dehne	23	3	do	Do.
Stralsund	1837	Junge	24	2	do	Do.
Demmin	1881	Gems	10	2	do	Private.
Berlinchen	1881	Marquardt	58	6	do	Do.
POSEN.						
Posen	1831	Matuszewski	124	11	do	Province.
Schneidemühl	1872	Reimer	111	10	do	Do.
Bromberg	1881	Lehmann	43	5	do	Do.

Silesia.						
Breslau	1821	Bergmann	160	11	do	Private.
Liegnitz	1831	Kratz	82	6	do	Do.
Ratibor	1836	Schwarz	160	14	do	Do.
Saxony.						
Halberstadt	1828	Keil	58	6	do	Province.
Weissenfels	1829	Köbrick	48	6	do	Do.
Halle-on-the-Saal	1835	Klotz	56	9	do	Private.
Osterburg	1878	Kühne	30	3	do	Province.
Erfurt	1822	Rode	61	5	do	Do.
Schleswig-Holstein.						
Schleswig	1787	Engelke	115	14	do	Province.
Schleswig		Köhler			do	
Hanover.						
Hildesheim	1829	Rössler	101	13	do	Province.
Stade	1857	Gude	89	10	do	Do.
Osnabrück	1857	Schrader	81	10	do	Do.
Emden	1844	Frese	43	4	do	Do.
Hessen Nassau.						
Camberg	1820	Wehrheim	84	10	do	Province.
Frankfort-on-the-Main	1827	Vatter	25	5	do	Do.
Homberg	1837	Kessler	84	9	do	Do.
Westphalia.						
Langenhorst	1841	Stahm	74	7	do	Do.
Petershagen	1839	Bökenkamp	66	7	do	Do.
Büren	1830	Dornseifer	39	4	do	Do.
Soest	1831	Plöger	80	9	do	Do.
Rhine Province.						
Aachen	1838	Linnartz	73	6	do	Do.
Brühl	1854	Fieth	86	7	do	Do.
Kempen	1841	Kirfel	57	4	do	Do.
Cologne	1828	Weissweiler	80	11	do	Private.
Neuwied	1854	Günther	80	6	do	Province
Trier	1881	Cüppers	75	6	do	Do.
Elberfeld	1881	Hilger	36	3	do	Do.
Essen	1881	Ochs	47	3	do	Do.
Fifty-two Institutions in Prussia			3,658	362		

Tabular Statement of the Institutions of the World—Continued.

GERMANY—Continued.

Location.	Date of Establishment.	Principal.	No. of Pupils.		No. of Teachers.	Method of Instruction.	How Supported.
			Male.	Female.			
BAVARIA.							
Munich	1826	Rev. Joseph Gunkel	40	34	10	Oral	State, city, voluntary contributions, and pay pupils.
Hohenwart	1877	Mrs. M. Beda Schmalholz	None.	58	5	do	District, voluntary contributions, and pay pupils.
Straubing	1835	Ed. Mutzl	35	26	4	do	Do. do.
Frankenthal	1825	Johann Reiss	22	16	2	do	Do. do.
Regensburg	1839	Johann Döring	29	8	2	do	Do. do.
Bamberg	1834	Rev. N. Eichhorn	12	14	5	do	Do. do.
Bayreuth	1823	Dr. Kraussold	8	10	1	do	Do. do.
Zell	1872	Johann E. Wagner	None.	56	4	do	Do. do.
Nuremberg	1832	Pastor Michahelles	20	13	3	do	City, voluntary contributions, and pay pupils.
Fürth	1875	Mr. Höchstetter	6	5	1	do	Do. do.
Altdorf	1831	Christoph Andr. Zahn	7	2	1	do	Voluntary contributions and pay pupils.
Würzburg	1835	Gregor Fischer	37	17	6	do	District, voluntary contributions, and pay pupils.
Augsburg	1851	Sebastian Koch	46	None.	3	do	Do. do.
Dillengen	1847	F. S. Wankmüller	None.	52	6	do	Do. do.
Fourteen Institutions in Bavaria			262	311	63		
SAXONY.							
Leipzig	1778	Dr. Eichler	68	60	18	do	State, city, voluntary contributions, and pay pupils.
Dresden	1828	Councillor Jencke	113	86	25	do	Do. do.
Plauen	1872	Councillor Jencke	24	13	25	do	Do. do.
Three Institutions in Saxony			205	159	43		

WÜRTEMBERG.							
Gmünd	1817 1869	Wilhelm Hirzel	30 24	26 16	6 4	do	State, city, voluntary contributions, and pay pupils.
Esslingen	1825	Mr. Pfisterer	23	16	4	do	Do. do.
Nürtingen	1846	Dr. Gundert			4	do	Do. do.
Winnenden	1824	Mr. Bellen	14	17	3	do	State, voluntary contributions, and pay pupils.
Wilhelmsdorf	1837	Mr. Ziegler	22	17	3	do	Voluntary contributions and pay pupils.
Heiligenbronn	1860	Mr. Fuchs	7	17	3	do	Do. do.
Seven Institutions in Würtemberg			120	109	27		
BADEN.							
Meersburg (formerly Pforzheim)	1826	Jacob Stein	67	40	10	do	State and pay pupils.
Gerlachsheim	1874	Mr. Willareth	58	43	9	do	Do. do.
HESSE.							
Friedberg	1837	Ludwig Wodäge	32	36	9	do	State and pay pupils.
Bendheim	1840	Jacob Buchinger	55	27	10	do	Do. do.
MECKLENBURG-SCHWERIN.							
Ludwigslust	1840	Mr. Mulsow	29	26	7	do	State and pay pupils.
OLDENBURG.							
Wildeshausen	1820		27	19	4	do	State and pay pupils.
SAXE-WEIMAR.							
Weimar	1820	Karl Oehlwein	16	14	4	do	State, voluntary contributions, and pay pupils.
BRUNSWICK.							
Brunswick	1822	Otto Danger	27	20	5	do	State, voluntary contributions, and pay pupils.
HAMBURG	1827	I. H. Söder	34	29	6	do	City, voluntary contributions, and pay pupils.
LÜBECK	1828	J. C. A. Bengue	4	6	1	do	Do. do.
BREMEN	1827		10	10	2	do	

Tabular Statement of the Institutions of the World—Continued.

GERMANY—Continued.

Location.	Date of Establishment.	Principal.	No. of Pupils. Male.	No. of Pupils. Female.	No. of Teachers.	Method of Instruction.*	How Supported.
ALSACE-LORRAINE.							
Ruprechtsau (formerly Colmar)	1826	Ch. Jacoutot	57	35	9	Oral	Province, district, and pay pupils.
Strasburg	1880	V. Paul	10	7	2	do	Province, city, and pay pupils.
Metz	1875	Mr. Erbrich	29	17	7	do	Province.
Ninety Institutions in Germany			5,608		580		

GREAT BRITAIN AND IRELAND.—1879.

					M.	*F.*		
Aberdeen, N. B., Belmont street	1819	Franklin Bill	14	7	1	†	Manual	Funded property, subscriptions, and pay pupils.
Bath, 8 and 9 Walcot Parade	1844	Miss Elwin, (Hon. Sec)	6	10	†	2	Combined	Annual bazaar, subscriptions, and pay pupils.
Belfast, Ireland	1831	Rev. John Kinghan	49	35	5	1	do	Subscriptions and help from Poor-Law Boards.
Boston Spa, Yorkshire	1870	Sisters of Charity of St. Vincent de Paul, under direction of Mgr. De Haerne.	45	41	†	5	do	Half by pensions and half by voluntary contributions.
Brighton, Sussex	1842	William Sleight	48	36	3	2		Pay pupils (about ¾) and subscriptions (about ¼.)
Bristol, Tyndall's Park	1844	William Barnes Smith	25	14	2	2	Manual	Voluntary contributions and pay pupils.
Doncaster, Yorkshire	1829	James Howard	75	52	6	2	Combined	Subscriptions and pay pupils.
Dublin, Ireland—St. Joseph's	1842	Rev. Bro. P. M. Wickham	210	†	11	†	Manual	Voluntary subscriptions and pensions paid by parents or Poor-Law Boards.
Do St. Mary's	1846	The Dominican Sisterhood	†	200	†	‡	do	Voluntary contributions.
Do...Claremont, Glasnevin	1816	Edward W. Chidley	29	23	2	3	do	Do. do.
Dundee, Scotland	1846	Alexander Drysdale	12	7	1	1	do	Vol. subscriptions and small endowment.
Edinburgh, Henderson Row	1810	James Bryden	33	27	3	1	Combined	Voluntary subscriptions.

Do.....Donaldson's Hospital.....	1850	Alfred Large.....	72	43	5	2	.....do.....	Endowment.
Exeter, Devonshire.....	1826	John Trelawney Hobbah.....	29	12	2	†	.....	Subscriptions and pay pupils.
Edgbaston, near Birmingham, Warwickshire.	1812	Arthur Hopper, B. A.....	69	51	2	5	Combined.....	Voluntary contributions and pay pupils.
Glasgow, Scotland.....	1819	John Thomson	68	52	4	3	.....do.....	Pay pupils and subscriptions.
Hull, Dock street.....	1869	Edward Bill	8	12	1	†	Manual	Subscriptions.
Llandaff, South Wales.....	1862	Alexander Melville	11	10	1	1	.....do.....	Voluntary contributions and pay pupils.
Liverpool, Oxford street.....	1825	James Gibbs.....	50	43	3	3	Combined.....	Pay pupils and subscriptions.
London, Old Kent Road, S.E.....	1792	Richard Elliott, M. A.....	86	72	9	5	Oral.....	Voluntary contributions.
Do..11 Fitzroy Square, W.....	1872	Wm. Van Praagh.....	35	32	3	5	.....do.....	Pupils fees and voluntary contributions.
Do..Lower Clapton, E.....	1851	D. Murray, B. A	†	40	1	2	.....	Voluntary subscriptions.
Do..Walmer R'd, Notting Hill, W	1866	S. Schontheil.....	14	11	2	1	Oral.....	Voluntary contributions.
Do..Wilmot st., Bethnal Green, E.	1874	Rev. William Stainer.....	36	29		3	Transition	School pence and rates.
Do..Winchest'r st., Pentonville, N	187-	....do.....	16	25	1	2	.....do.....	Do. do.
Do..Bell st., Edgware Road, W...	1876	..... do.....	12	9		1	.....do.....	Do. do.
Do. Victory Place, Walworth, S.E	1875	.... do.....	13	12		1	.....do.....	Do. do.
Do..Upper Grange Road, Bermondsey, S.E.	1879	Miss E. Denton	7	3	†	1	Oral.....	London School-Board.
Do..Castlebar Hill, Ealing, W...	1878	Arthur A. Kinsey.....	3	3	1	†	.....do.....	School and college fees and voluntary contributions.
Do..89 Holland Road, Kensington, W.	.....	Miss Susanna E. Hull	.....	.....	†	1	.....do.....	Private.
Manchester, Old Trafford.....	1823	Andrew Patterson.....	92	67	5	5	Combined.....	Subscriptions and pay pupils.
Margate, Kent.....	1862	Richard Elliott, M. A.....	83	59	6	4	.....do.....	Voluntary contributions.
Newcastle-on-Tyne, Mooredge.....	1838	William Neill.....	60	40	4	1	.....do.....	Pay pupils and subscriptions.
Swansea, South Wales.....	1847	B. H. Payne	21	13	2	1	.....do.....	Voluntary subscriptions and pay pupils.
Northampton.....	.....	Rev. Thos. Arnold.....	.....	.....	.....		Oral	Private.
Thirty-four Institutions in Great Britain and Ireland.....			1,331	1,090	86	66		

ITALY.—1880.

Genoa.....	1801	C. A. Boselli.....	46	40	10	Combined.....	State, province, city, and pay pupils.
Milan	1805	Sac. Cav. El. Ghislandi	32	20	15	Oral.....	State, voluntary contributions, and pay pupils.
Modena	1822	Sac. Lorenzo Giannasi.....	22	None.	3	.....do.....	Province, voluntary contributions, and pay pupils.
Siena.....	1828	Comm. T. Pendola.....	53	34	16	..... do	Province, city, voluntary contributions, and pay pupils.
Verona.....	1830	Giulio Mioritori..	19	10	8	.....do	City, voluntary contributions, and pay pupils.

* For a fuller statement of the methods of the British Institutions, see the *Annals*, vol. xxvi, (July, 1881,) pp. 187-192. † None. ‡ Community.

Tabular Statement of the Institutions of the World—Continued.

ITALY—Continued.

Location.	Date of Establishment.	Principal.	No. of Pupils.		No. of Teachers.	Method of Instruction.	How Supported.
			Male.	Female.			
Palermo	1834	Sac. Placido Conti	29	17	5	Oral	State and pay pupils.
Turin	1835	Sac. Lino Lazzeri	48	40	12	do	Province, city, and pay pupils.
Brescia	1836	Sac. Quinto Metelli	24	None.	4	do	
Crema	1840	Superiora Margherita Ferni	None.	21	4	do	Province and voluntary contributions.
Vicenza	1840	Ab. Antonio Demarchi	None.	6	2	do	Voluntary contributions.
Rome	1841	Sac. Luigi Bertaccini	45	36	9	do	State, province, and pay pupils.
Bergamo	1844	Sac. Giuseppe Ghislandi	43	11	10	do	Province, city, voluntary contributions, and pay pupils.
Modena	1846	Sac. Giuseppe Pollastri	None.	32	4	do	Province, voluntary contributions, and pay pupils.
Cremona	1847	Canon. Mons. And. Arisi	None.	29	4	do	Province and pay pupils.
Venice	1849		None.	29	6	do	State, province, city, and pay pupils.
Bologna	1850	Sac. Cesare Gualandi, Sac. Giuseppe Gualandi	63	40	14	do	Province and charitable contributions.
Bologna	1850	Sig. Anna Monti	None.	26	4	do	Province, city, and pay pupils.
Como	1852	Sac. Serafino Balestra	None.	20	6	do	Province and pay pupils.
Oneglia	1852	Sac. Antonio Capetta	29	None.	3	do	State and provinces.
Milan	1853	Cav. Sac. Giulio Tarra	60	53	12	do	Voluntary contributions.
Mantua	1853	Suor Ancilla Teresa Rota	None.	10	8	do	Province and pay pupils.
Naples	1855	Sac. Lorenzo Apicella	40	43	8	do	
Pavia	1856	Sig. A. Beccalli	21	28	13	do	Province, city, voluntary contributions, and pay pupils.
Brescia	1856	Suora Giulia Fantasia	None.	11	3	do	Province and pay pupils.
Lodi	1856	Sac. Giovanni Savaré	55	19	9	do	State, provinces, and city.
Catanzaro	1859	A. L. Spadola	22	None.	4	do	Province, city, and pay pupils.
Casoria	1860		None.	30	5	do	Voluntary contributions and pay pupils.
Molfetta	1863	Sac. Luigi Ajello	29	None.	3	do	Voluntary contributions.
Molfetta	1865	do	None.	18	3	do	Do. do.
Genoa	1866	Suora di S. Vincenzo da Paola	None.	44	6	do	
Cagliari	1869	Antioco Vincenzo Cané				do	State, province, city, and voluntary contributions.

Venice	1870	Sig. Natale Crovato	30	None.	6	.....do.....	State and pay pupils.
Assisi	1872	Sig. Diego di S. Francesco	10	None.	2	.....do.....	Voluntary contributions.
Chiavari	1874	P. Luigi Revelli	11	None.	4	.....do.....	Province and pay pupils.
Naples	1877	.....	84	7	12	.....do.....	State and pay pupils.
Thirty-five Institutions in Italy.	.....	.....	815	676	237		

JAPAN*.—1880.

Funa yamachi, Tokio Ku, Kiota	1878	Furnkawa Tashiro	26	14	5	Manual	Donat'n taxes levied on citizens of Kiota.
Hoyensaka machi, Higashi Ku, Osaka.	1879	Hiyanigi Seisaka	11	14	2	.....do.....	Funds for almshouses of Osaka.
Two Institutions in Japan	.....	.....	37	28	7		

NETHERLANDS.—1880.

Groningen	1790	A. W. Alings, Ph. D.	115	86	19	Combined	State, province, voluntary contributions, and pay pupils.
St. Michielsgestel	1840	C. J. A. Terwindt	74	72	11	.....do.....	Do. do.
Rotterdam	1853	D. Hirsch	67	51	10	Oral	Do. do.
Three Institutions in the Netherlands.	.....	.....	256	209	40		

NORWAY.—1880.

Trondhjem	1824	.....	29	30	11	.....	State and pay pupils.
Christiania	1848	Fred. G. Balchen	50	44	11	Combined	Private, with State aid.
Christiansland	1850	Ernest H. Zeisler	44	26	6	Oral	Do. do.
Bergen	1850	Nils C. Waagle	32	28	6	Combined	Do. do.
Christiania	1881	.....	.....	.....	.....	Oral	
Five Institutions in Norway	.....	.....	155	128	34		

PORTUGAL.—1881.

Porto	1870	Elizeu de Aguillar	7	1	1	.....	State and pay pupils.

* The two Institutions in Japan have blind pupils also, but only the statistics of the deaf-mute departments are here given.

Tabular Statement of the Institutions of the World—Continued.

RUSSIA.*

Location.	Date of Establishment.	Principal.	No. of Pupils.		No. of Teachers.	Method of Instruction.	How Supported.
			Male.	Female.			
St. Petersburg	1806	C. Selesneff				Combined	State.
Warsaw	1817	J. Paplonski					
Odessa	1849						
Three Institutions in Russia							

SPAIN.†—1881.

Madrid	1805	M. F. Villabrille	30	46	3	Combined	State.
Barcelona	1816	F. Ronquillo	36	29	3	do	City.
Salamanca	1863	L. Rodriguez	9	2	2	do	Province.
Santiago	1864	M. L. Navalon	11	7	2	do	District.
Burgos	1868	A. Sedam	16	11	2	do	Province.
Saragossa	1871	A. Trellam	1	2	1	do	Province and city.
Seville	1873	A. Pichardo y Casado	22	None.	3	do	Province.
Seven Institutions in Spain			125	97	16		

SWEDEN.—1881.

Stockholm	1809	O. Kyhlberg, Ph. D.	83	50	12	Combined	State, vol'y contrib's, and pay pupils.
Karlskrona	1858	Sofia Ulfsparre	24	21	7	do	State, district, and pay pupils.
Gottenburg	1859	S. Sjögren	21	11	4		Do. do.
Hjorted	1859	J. Östberg	18	12	4	Combined	Do. do.
Stockholm	1860	Jeanette Berglind	7	13	4		Do. do.
Gottenburg	1862	P. Brodahl	12	7	3		State and pay puplils.
Rephutt	1862	L. B. Fæltenborg	20	9	3		State, district, and pay pupils.
Hernösand	1867	S. Lagerström	19	13	3		Do. do.

Lund	1871	A. G. Flodin	40	15	8	Combined	Do. do.
Falun	1873	A A. Berg	12	8	3	Oral	Do. do.
Gumpeten	1874	T. Kaijser	17	14	3		Do. do.
Alborga	1874	O. Krutmejer	11	8	2		State and pay pupils.
Orebro	1875	J. P. Blomkvist	15	10	4	Oral	State, district, and pay pupils.
Wenersborg	1877	S. Kinman	8	15	3	do	Do. do
Wadstena	1878	E. A. Zotterman	35	20	4	Manual	State.
Skara	1879	F. Nordin	28	24	5	do	Do.
Bollnäs	1880	C. K. Ekbohrn, M. A	15	15	2	Combined	Do.
Seventeen Institutions in Sweden			385	265	74		

SWITZERLAND.—1878.

Zurich	1827		28	15	5	Oral	Canton, city, voluntary contributions, and pay pupils.
Frienisberg, Berne	1822		60	None.	5	do	Canton and pay pupils.
Wabern, Berne	1824		None.	33	3	do	Canton, voluntary contributions, and pay pupils.
Hohenrain, Luzerne	1832		None.	27	4	do	Canton and pay pupils.
Riehen, Basle	1838		23	23	5	do	Do. do.
St. Gallen	1859		26	22	6	do	Canton, voluntary contributions, and pay pupils.
Aarau	1835		17	12	2	do	Do. do.
Zofingen, Aargau	1837		19	18	3	do	Do. do.
Liebenfels, Aargau	1850		9	3	1	do	Do. do.
Moudon, Vaud	1869		None.	30	3	do	Canton and pay pupils.
Geneva			None.	15	2	do	Canton, voluntary contributions, and pay pupils.
Eleven Institutions in Switzerland			182	198	39		

* We have not been able to obtain recent information concerning the Russian Institutions

† All the Spanish schools have blind as well as deaf-mute pupils, but only the statistics of the deaf-mute departments are here given.

Tabular Statement of the Institutions of the World—Continued.

UNITED STATES.—1881.

	Name.	Location.	Date of Opening.	Chief Executive Officer.	No. of Pupils.					No. of Instructors.†				
					During the year.	Male.	Female.	Semi-Mute.*	Present Dec. 1, 1881.	Whole No.	Male.	Female.	Deaf-Mute ‡	Semi-Mute.*
1	American Asylum	Hartford, Conn	1817	Job Williams, M. A., Principal	218	132	86	23	180	16	7	9	1	2
2	New York Institution (*a*)	Washington Heights, New York, N.Y.	1818	Isaac Lewis Peet, LL.D., Principal; Wm. Porter, M.D., Supt. & Res't Physician.	553	345	208	58	481	19	11	8	4	6
3	Pennsylvania	do	1820	Joshua Foster, Principal	402	227	175	49	319	19	12	7	3	1
4	Kentucky	do	1823	D. C. Dudley, M. A., Principal	168	96	72	7	139	9	6	3	3	1
5	Ohio	do	1829	Chas. Strong Perry, M. A., Superintend't.	512	276	236	108	431	26	12	14	9	6
6	Virginia	do	1839	Thomas S. Doyle, Principal	101	59	42	9	85	9	8	1	2	1
7	Indiana	do	1844	William Glenn, Superintendent	405	224	181	80	325	18	9	9	5	4
8	Tennessee School	Knoxville, Tenn	1845	Joseph H. Ijams, B. A., Principal	107	66	41	12	103	8	4	4	4	None.
9	North Carolina Inst'n	Raleigh, N. C	1845	Hezekiah A. Gudger, M. A	do	109	58	51	.....	99	9	6	3	2	1
10	Illinois	do	1846	Philip G. Gillett, LL. D., Sup't	592	372	220	120	508	28	8	20	6	1
11	Georgia	do	1846	W. O. Connor, Principal	71	40	31	9	47	5	4	1	1	2
12	South Carolina	do	1849	Newton F. Walker, Superintendent	43	14	29	3	37	3	2	1	2	None.
13	Missouri	do	1851	Wm. D. Kerr, M. A	do	244	148	96	23	190	11	5	6	2	1
14	Louisiana	do. (*a*)	1852	A. K. Martin	do	43	23	20	1	35	3	2	1	2	None.
15	Wisconsin	do	1852	John W. Swiler, M. A	do	218	127	91	60	178	10	5	5	2	None.
16	Michigan	do	1854	Thomas MacIntire, Ph. D., Principal	294	159	135	.....	249	15	8	7	3	2
17	Iowa	do. (*a*)	1855	Council Bluffs, Iowa	Rev. A. Rogers, Superintendent	196	115	81	13	192	13	8	5	2	3
18	Mississippi	do	1858	Jackson, Miss	J. R. Dobyns	do	78	41	37	20	67	4	3	1	2	1
19	Texas Asylum (*a*)	Austin, Texas	1857	John S. Ford	do	89	53	36	22	78	5	2	3	2	None.
20	Columbia Institution	Washington, D. C	1857	E. M. Gallaudet, Ph. D., LL. D., Pres't.	107	95	12	32	79	12	10	2	2	3
21	Alabama	do	1860	Talladega, Ala	Joseph H. Johnson, M. D., Principal	50	30	20	None.	44	5	3	2	3	None.
22	California	do	1860	Berkeley, Cal	Warring Wilkinson, M. A	do	118	72	46	12	108	8	5	3	3	None.
23	Kansas	do	1862	Olathe, Kansas	W. H. DeMotte, LL. D., Superintendent.	171	89	82	35	146	8	4	4	2	None.
24	Le Couteulx St. Mary's Inst	Buffalo, N. Y	1862	Sister Mary Anne Burke, Principal	134	75	59	20	128	11	None.	11	1	None.
25	Minnesota Institution	Faribault, Minn	1863	Jonathan L. Noyes, M. A., Superintend't.	135	79	56	28	112	8	4	4	1	3
26	Inst'n for Improved Instr'n	New York, (*a*) N.Y	1867	D. Greenberger, Principal	154	85	69	19	137	13	1	12	None.	None.
27	Clarke Institution	Northampton, Mass	1867	Miss Harriet B. Rogers, Principal	92	47	45	17	88	13	None	13	None.	1
28	Arkansas Institute	Little Rock, Ark	1868	H. C. Hammond, M. A., Principal	74	47	27	3	59	5	3	2	2	None.

29	Maryland School	Frederick City, Md.	1868	Chas. W. Ely, M. A., Principal	100	59	41	8	84	9	3	6	3	1
30	Nebraska Institute	Omaha, Neb.	1869	J. A. Gillespie, B. D., Principal	91	57	34	.....	85	7	3	4	1	None.
31	Horace Mann School	Boston, (*b*) Mass.	1869	Miss Sarah Fuller, Principal	88	40	48	18	79	9	None.	9	None.	None.
32	Whipple's Home School	Mystic River, Conn.	1869	J. and Z. C. Whipple, Principals	12	9	3	2	10	3	2	1	None.	None.
33	St. Joseph's Institute (*f*)	Fordham, N. Y.	1869	Mme. Victorine Boucher, President	251	99	152	17	250	21	1	20	1	2
34	West Virginia Institution	Romney, W. Va.	1870	J. C. Covell, M. A., Principal	78	46	32	12	78	6	5	1	1	2
35	Oregon School	Salem, Oregon	1870	Rev. P. S. Knight.....do	39	19	20	7	26	3	2	1	1	None.
36	Institution for Colored	Baltimore, (*c*) Md.	1872	F. D. Morrison, M. A., Superintendent	20	11	9	None.	10	2	1	1	1	None.
37	Ev. Lutheran Institution	Norris, Mich	1873	H. D. Uhlig, Principal	41	25	16	None.	44	3	3	None.	None.	None.
38	Colorado Institution	Colorado Sp's, Colo.	1874	R. P. McGregor, B. A., Principal	40	18	22	7	39	3	2	1	None	2
39	Erie Day-School	Erie, Pa.	1874	Miss Mary Welsh, Teacher	12	9	3	None.	11	1	None.	1	None.	None.
40	Chicago Day-Schools' (*m*)	Chicago, Ill.	1875	P. A. Emery, M. A., Principal	65	34	31	4	50	6	3	3	1	3
41	Central N. Y. Institution	Rome, N. Y.	1875	Edward B. Nelson, B. A.....do	168	100	68	.....	160	12	8	4	4	4
42	Cincinnati Day-School	Cincinnati, (*e*) O.	1875	A. F. Wood.....do	23	15	8	4	23	2	1	1	2	None.
43	Western Penna. Inst'n	Turtle Creek, Pa.	1876	John A. McWhorter, M. A., do	119	73	46	16	104	7	3	4	None.	2
44	Western New York Inst'n	Rochester, N. Y.	1876	Z. F. Westervelt.....do	132	70	62	19	116	13	3	10	1	1
45	Portland Day-School	Portland, Me.	1876	Miss Ellen L. Barton.....do	25	14	11	6	25	4	None.	4	None.	None.
46	St. John's Cath. Institute	St. Francis, Wis.	1876	Rev. Chas. Fessler.....do	43	27	16	8	37	4	2	2	None.	None.
47	Rhode Island School	Providence, R. I.	1877	Joseph W. Homer, Principal	29	16	13	8	21	4	1	3	None.	None
48	Mr. Knapp's School (*i*, *n*)	Baltimore, (*g*) Md.	1877	Frederick Knapp, Principal	30	17	13	.....	30	3	1	2	None.	None.
49	Phonological Institute	Milwaukie, (*k*) Wis.	1878	Adam Stettner, Principal	21	12	9	None.	19	2	1	1	None.	None.
50	St. Louis Day-School	St. Louis, (*l*) Mo.	1878	D. A. Simpson, B. A., Principal	44	24	20	2	42	2	1	1	None.	2
51	School of Articulation (*n*)	Marquette, Mich.	1879	Mrs. A. M. Kelsey, Principal	3	1	2	1	3	1	None.	1	None.	None.
52	N. E. Industrial School	Beverly, Mass.	1880	William B. Swett, Superintendent	15	9	6	1	15	2	1	1	1	None.
53	Scranton Day-School	Scranton, Pa.	1880	Jacob M. Koehler, Principal	13	8	5	None.	10	1	1	None.	None.	1
54	Dakota School	Sioux Falls, D. T.	1880	James Simpson, Superintendent	19	15	4	1	15	1	1	None.	None.	1
55	Oral Branch Pa. Inst'n	Philadelphia, (*o*) Pa.	1881	Miss Emma Garrett, Teacher	20	14	6	1	20	2	None.	2	None.	None.
55	Institutions in the U. S.				7019	4034	2985	‡925	6038	444	100	244	87	60
	National College¶	Washington, D. C.	1864	E. M. Gallaudet, Ph. D., LL. D., Pres't.	62	62	None.	29	38	7	7	None.	None.	2

* Under this head are included the semi-deaf and all the deaf who have acquired some knowledge of language through the ear.
† Including the principal. ‡ Not including the semi-mute teachers. ‡ Number in 50 institutions, containing 6347 pupils.
¶ The National Deaf-Mute College is a distinct organization within the Columbia Institution. Its officers and students are included in the statement of the Columbia Institution given above. (*a*) Lexington Ave., bet. 67th and 68th sts. (*b*) No. 63 Warrenton street. (*c*) No. 258 Saratoga street (*e*) Franklin street, near Main. (*f*) This Institution has three branches; one situated at Fordham, another at Brooklyn, (510 Henry street,) and another at Throgg's Neck, Westchester county, N. Y. (*g*) Nos. 29, 31, and 33 Holliday street. (*i*) School for hearing youth, but having classes of deaf-mutes. (*k*) 594 National avenue. (*l*) Cor. 9th and Wash streets. (*m*) There are five schools in different parts of the city. Mr. Emery's address is 55 S. Halsted street. (*n*) For the year 1880. (*o*) S. E. Corner 17th and Chestnut streets.

Tabular Statement of the Institutions of the World—Continued.

UNITED STATES—Continued.

	Name.	Method of Instruction.	School-hours.	Trades.‡	How Supported.	Value of buildings and grounds.	Expend're last fiscal year. For support.	Expend're last fiscal year. For build'gs and gro'ds.	No. vols. in library.	Tot. No. pupils have received instruct'n.
1	American Asylum	Combined..	9 to 12 and 2 to 4	Cab., Sh., Ta..	Endowment and N. E. States	$250,000	$48,890	$2,435	2000	2279
2	New York Institution	....do....	8 to 12 and 1 to 5 †.	Car.,Cab.,Bak.,Dr. Ga.,Pa.,Pr.,Sh.,Ta	State, counties, and pay pupils	524,000	.....	.....	3900	2894
3	Pennsylvania...do	....do....	8½ to 11½ and 1½ to 3½.	Dr., Li., Sh., Ta...	State and pay pupils	500,000	71,302	3.572	5000	1973
4	Kentucky .....do	....do..	8 to 1..... .....[to 5‡	Bo., Br., Ca., Pr...	State.....	130,000	26,705	20,000	50	788
5	Ohio .....do	....do.	7½ to 9¾, 10½ to 12½, 2	Bo., Car., Pr., Sh...	...do	500,000	82,511	3,000	1800	1804
6	Virginia*.....do	....do....	8½ to 1½	Bo., Car , Pa., Pr., Sh., Ta.	...do	175,000	20,000	.....	500	530
7	Indiana .....do	.... do.	7¾ to 1	Cab.,Ch., Sh.	...do	457,510	54,831	.....	3003	1394
8	Tennessee School	....do.....	9 to 12 and 1½ to 3½.....	Pr., Sh	...do	140,000	24,369	.....	200	.....
9	North Carolina Institution*.	Transition..	8 to 2	Cooking, Sh.	...do	75,000	24,000	.....	600	349
10	Illinois.....do	Combined..	8 to 11 and 12, 1 to 3 and 4½	Bak.,Cab ,Ga.,Pr., Sh.,Wt.	...do	328,000	85,000	14,000	4770	1544
11	Georgia.....do	Manual....	8 to 1	Sh	...do	30,000	14,241	.....	10.0	300
12	South Carolina*.....do	Combined..	8 to 1	Pr., Sh., Se	...do	35,000	8,092	2,044	.....	170
13	Missouri.....do	....do.....	8 to 11 and 1 to 3	Cab., Pr., Sh	...do	132,000	.....	.....	1008	757
14	Louisiana .. ..do	.... do.....	8 to 1	Pr.....[Se.	...do	50,000	.....	.....	350	175
15	Wisconsin .....do	....do.....	7¾ to 12½.....	Ba., Cab., Pr., Sh.,	...do	100,000	40,888	23,286	694	586
16	Michigan.....do	....do.....	8½ to 11½ and 1 to 4	Cab., Pr. Sh	...do	377,525	46,916	2,312	2130	717
17	Iowa.....do	....do.....	8 to 12 and 1¼ to 2¼.....	Car., Pr., Sh	...do	125,000	.....	.....	500	546
18	Mississippi.....do	Manual....	8 to 1½	None	...do	45,000	10,000	.....	300	200
19	Texas Asylum	Combined..	8½ to 1½	Ma., Pr., Sh	...do	90,000	.....	.....	108	202
20	Columbia Institution	....do....	8¼ to 12¼ and 2 to 3	Cab	United States and pay pupils	650,000	58,108	7,318	2850	431
21	Alabama*.....do	....do.....	8 to 1	Ch., Pr., Sh	State	60,000	12,500	4,000	500	171
22	California*.....do	....do.....	8 to 1	None	...do	320,000	38,000	45,000	.....	232
23	Kansas.....do	....do.....	8¾ to 12 and 1¼ to 3.....	Cab , Pr., Se., Sh.	...do	54,000	19,500	.....	300	276
24	Le Couteulx St. Mary's Inst.	....do.....	8 to 12 and 1½ to 4†	Dr., Pr., Ta.....	State, counties, and pay pupils	54,000	19,000	14,000	450	306
25	Minnesota Institution	....do'.....	8 to 12½	Co.,Dr.,Pr.,Sh.,Ta	State	175,000	24,425	100	900	281

26	N.Y.Inst. for Improv'd Ins'n	Oral	9 to 12 and 1¼ to 3¾	None	State, counties, and pay pupils	260,000	35,454	139,665	512	252
27	Clarke Institution	do	9 to 12 and 2 to 4	Cab., Se.	Endowment, State, and pay pupils	90,000	25,814	1,139	850	201
28	Arkansas Institute	Combined	8 to 12½ [to 4½‡	Pr., Dr., Ga., Sh.	State	35,500	13,600	1,200	75	150
29	Maryland School	do	7½ to 9¾, 9¾ to 12½, 2	Cab., Pr., Sh.	do	250,000	23,186	970	2100	234
30	Nebraska Institute	do	8½ to 12 and 1½ to 3	Car., Pr., Se.	State	61,000		23,000	550	144
31	Horace Mann School	Oral	9 to 2	Se.	State and city					191
32	Whipple's Home School	do	9 to 12 and 1 to 4	None	Private	7,000				51
33	St. Joseph's Institute	Combined	9 to 12 and 1½ to 3½	Dr., Se., Ga., Ba.	State, counties, and pay pupils	146,914	19,219	33,265	400	319
34	West Virginia Institution*	do	8½ to 1½	Car., Pr., Sh, Ta.	State	75,000	21,634	2,756	591	183
35	Oregon School	Manual	9 to 12 and 1 to 3	None	do	1,200	4,000	1,190		61
36	Md. Inst'n for Colored*	do	8 to 1	Br., Ta.	do	25,000				31
37	Ev. Lutheran Institution	Oral	6 hours	None	Ev. Luth. Conference of N. America	20,000				79
38	Colorado Institution*	Manual	7½ to 12½	Pr.	State	50,000	8,000	20,000	40	50
39	Erie Public Day-School	Oral	9 to 12 and 1½ to 3½	None	City					20
40	Chicago Day-Schools	Manual	9 to 12 and 1 to 2½	None	State					98
41	Central N. Y. Institution	Combined	9 to 12 and 1½ to 3½	Car., Dr., Gl., Sh.	State and counties	92,000	34,287	9,376	100	214
42	Cincinnati Day-School	Manual	9 to 12 and 1½ to 4	None	do					68
43	Western Pa. Institution	Combined	8½ to 11½ and 1 to 3	None	do	20,000	19,911		100	150
44	Western N. Y. Institution	do	7½ to 10, 10¼ to 12¾, 2 to 4½‡	Car., Dr., Ga. Pr.	State and counties	96,000	27,901		650	174
45	Portland Day-School	Oral	9 to 12 and 2 to 4	None	City and pay pupils					29
46	St. John's Catholic Inst.	Combined	6½ hours	Sh.	Private	14,000				104
47	Rhode Island School	Oral	9 to 1	None	State				250	28
48	Mr. Knapp's School	do	9 to 2	None	Private	60,000				
49	Phonological Institute	do	9 to 12 and 1 to 4	None	Vol. contributions and pay pupils	10,000				30
50	St. Louis Day-School	Manual	8¾ to 12 and 1¼ to 3¾	None	City					64
51	Marquette School	Oral	9 to 12 and 1½ to 3	None	Private					
52	N E. Industrial School	Combined	9 to 12 and 2 to 4	Farming	Voluntary contributions	7,500	1,400	168	200	20
53	Scranton Day-School	Manual	9 to 11¾ and 1 to 3	None	City					15
54	Dakota School	do	9 to 12 and 2 to 4	None	Territory	5,000		5,000		15
55	Oral Branch Pa. Inst'n	Oral	9½ to 1½	None	Pennsylvania Institution					20
55	Institutions in the U. S									21886
	National College	Manual	8 to 12¼ and 1½ to 3½	None	Columbia Institution				2350	234

* Contains a department for the blind also, the expenses of which are necessarily included in the statement of expenditure.
† One session for school and one for shops, by a system of rotation. ‡ Two sessions for school and one for shops, by a system of rotation.
§ Bak.=Baking. Bas.=Basket-making. Bo.=Book-binding. Br.=Broom-making. Cab.=Cabinet-making. Car.=Carpentry. Ch.=Chair-caning. Co.=Coopery. Dr.=Dress-making. Ga.=Gardening. Gl.=Glazing. Li.=Lithography. Ma.=Mattrass-making. Pa.=Painting. Pr.=Printing. Se.=Sewing. Sh.=Shoemaking. Ta.=Tailoring. Wc.=Wood-carving. Wt.=Wood-turning.

Tabular Statement of the Institutions of the World—Continued.

CANADA.—1881.

	Name.	Location.	Date of Opening.	Chief Executive Officer.	No. of Pupils.					No. of Instructors.†				
					During the year.	Male.	Female.	Semi-Mute.*	Present Dec. 1, 1881.	Whole No.	Male.	Female.	Deaf-Mute.‡	Semi-Mute.*
1	Catholic Inst'n (Male)	Montreal, Can.	1848	Rev. Alf. Belanger, Principal	171	171	None.	3	126	22	22	None	3	None.
2	Catholic Inst'n (Female)	Montreal, Can.	1851	Sister Philippe, Superior	215	None.	215	25	215	32	None.	32	4	None.
3	Halifax Institution	Halifax, N. S.	1857	Albert F. Woodbridge, Principal	76	45	31	5	64	3	2	1	1	None.
4	Ontario.....do.....	Belleville, Ontario.	1870	R. Mathison, Superintendent.	296	164	132	14	255	15	8	7	3	1
5	Mackay Institution	Montreal, Can.	1870	Thos. Widd, Principal	34	22	12	4	36	2	1	1	1	None.
6	New Brunswick Inst'n	Portland, N. B.	1873	A. H. Abell, Principal	18	10	8	2	16	1	1	None.	1	None.
6	Institutions in Canada				810	412	398	53	712	75	34	41	13	1

	Name.	Method of Instruction.	School-hours.	Trades.§	How Supported.	Value of buildg's and grounds.	Expend're last fiscal year.		No. volumes in library.	Total No. pupils have rec'd instr'n.
							For support.	For build'gs and gro'ds.		
1	Montreal Cath. Inst. (Male)	Oral	8 to 11 and 1½ to 4	Bo.,Cab., Pr., Sh., Ta., Wt.	Province, labor, and vol. contrib'ns	$50,000	$21,915	$3,000	1867	426
2	Montreal Cath. Inst. (Fem.)	Combined	8½ to 12 and 1 to 3½	Dr., Se.		175,000			2000	500
3	Halifax Institution	do	9 to 12½ and 2 to 4	Car., Pr., Sh., [Ta.	Maritime provinces and vol. contrib'ns.	20,000	5,798	90	400	253
4	Ontario.....do.....	do	9 to 12 and 1½ to 3	Cab., Car., Dr. Sh.	Province	148,991	36,597	5,600	1400	552
5	Mackay.....do.....	do	9 to 12 and 1½ to 4	Ga., Pr., Sh.	Province, pay pupils, and vol. contrib's.	40,000	7,020	3,000	100	8
6	New Brunswick Institution.	Manual	9 to 12 and 2 to 4	Car., Ga., Se., Sh., Pa.	.....Do.....do.....	8,000	1,500	900	750	75
6	Institutions in Canada									1886

* Under this head are included the semi-deaf and all the deaf who have acquired some knowledge of language through the ear.
† Including the principal. ‡ Not including the semi-mute teachers.
§ Bo.=Book-binding. Cab.=Cabinet-making. Car=Carpentry. Dr=Dressmaking. Ga.=Gardening. Pa=Painting. Pr.=Printing. Se.=Sewing. Sh.=Shoemaking. Ta.=Tailoring. Wt.=Wood-turning.

SUMMARY.

Country.	No. of Institutions.	No. of Pupils.			No. of Teachers.	Methods of Instruction.									
						Manual.		Oral.		Combined.		Transition.		Not report'd.	
		Male.	Female.	Total.		No. of Institutions.	No. of Pupils.	No. of Institutions.	No. of Pupils.	No. of Institutions.	No. of Pupils.	No. of Institutions.	No. of Pupils.	No. of Institutions	No. of Pupils.
Australia	3	74	59	133	9	.....	.....	.....	.....	.....	.....	.....	.....	3	133
Austria-Hungary	17	645	446	1,128	60	.....	.....	17	1,128	.....	.....	.....	.....	.....	.....
Belgium	10	482	382	864	.....	.....	.....	4	285	5	525	1	54	.....	.....
Brazil	1	32	.....	32	3	.....	.....	.....	.....	.....	.....	.....	.....	1	32
Canada	6	412	398	810	75	1	18	1	171	4	621	.....	.....	.....	.....
Denmark	4	150	176	326	41	1	142	2	150	.....	.....	.....	.....	1	34
France	63	1,656	1,301	2,957	240	5	248	7	330	7	412	9	864	32	1,103
Germany	90	1,042*	908*	5,608	580	.....	.....	90	5,608	.....	.....	.....	.....	.....	.....
Great Britain and Ireland	34	1,331	1,090	2,421	152	7	582	7	266	13	1,256	4	152	3	165
Italy	35	815	676	1,491	237	.....	.....	34	1,405	1	86	.....	.....	.....	.....
Japan	2	37	28	65	7	2	65	.....	.....	.....	.....	.....	.....	.....	.....
Netherlands	3	256	209	465	40	.....	.....	1	118	2	347	.....	.....	.....	.....
Norway	5	155	128	283	34	.....	.....	2	70	2	154	.....	.....	1	59
Portugal	1	7	1	8	1	.....	.....	.....	.....	.....	.....	.....	.....	1	8
Russia	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
Spain	7	125	97	222	16	.....	.....	.....	.....	7	222	.....	.....	7	.....
Sweden	17	385	265	650	74	2	107	3	68	5	293	.....	.....	.....	182
Switzerland	11	182	198	380	39	.....	.....	11	380	.....	.....	.....	.....	.....	.....
United States	55	4,034	2,985	7,019	444	10	412	12	527	32	5,971	1	109	.....	.....
Total	364	11,820*	9,347*	24,862	2,052	28	1,574	191	10,506	78	9,887	15	1,179	52	1,716

* The reports from the Prussian Institutions do not indicate the sex of the pupils.

EFFICIENCY AND INTELLIGENCE IN TEACHING.

BY DAVID S. ROGERS, B. A., CEDAR SPRING, S. C.

THE great end of a school establishment is the education of the pupils, as Mr. Carroll forcibly said in the last October number of the *Annals*, and everything else should be made subordinate to this end. Now, as the work of education must be chiefly done by the teachers, two essential points in regard to them should be observed—efficiency and intelligence.

Efficiency in teaching means ability and skill to make the pupil understand what it is needful for him to know. A teacher who has only a few ideas, but is able to impart them to the pupil, is more valuable than one with a multitude of ideas, but who lacks the ability to communicate them. Hence, the value of a teacher's services is proportional to the degree of his ability to make the pupil comprehend what he is taught.

Teaching is sometimes unsuccessful owing to lack of intelligence on the part of the teacher. A teacher who allows his class to go through a lesson without having understood it thoroughly does an unintelligent thing. His labors and the time of the pupils are wasted. It is the ambition of some teachers of deaf-mutes to push their classes through books rapidly, without taking care to see that they understand thoroughly what they study. This course causes a good deal of mischief, and, instead of promoting, retards the accomplishment of the great end. The proverb that "haste makes waste" should be as carefully considered in the school-room as elsewhere.

Knowledge is acquired by understanding the language in which the literature, sciences, and philosophies of the nation are written. As the deaf-mute, when he first comes to school, is unacquainted with spoken and written language, and, consequently, cut off from knowledge, common sense dictates that the teacher's best efforts and attention should first be directed to giving him an understanding of the national language.

From personal experience, as well as observation, I can say that for the deaf-mute to learn the English language is his hardest task, and when he has learned it his education is more than half accomplished. Therefore a large part of his school time cannot be so profitably employed in any other way as in teaching him English. Thus, and thus only, can the foundation of his education be laid, and the great end practically achieved.

THE NEXT CONVENTION.

NATIONAL DEAF-MUTE COLLEGE,
WASHINGTON, *Dec. 12th*, 1881.

The undersigned, on behalf of the Standing Executive Committee of the Convention of American Instructors of the Deaf and Dumb, begs leave to call attention, through the pages of the *Annals*, to the fact that the time for the next meeting of the Convention is drawing near. Unless circumstances now unforeseen should hinder, it will be held during the summer of 1882.

Principals of Institutions who may be able and disposed to entertain the Convention are requested to communicate with the undersigned at as early a day as practicable.

A meeting of the Committee will be called within a few weeks, at which all suggestions as to the Convention will be considered.

E. M. GALLAUDET,
Chairman, etc., etc.

NOTICES OF PUBLICATIONS.

BY THE EDITOR.

ALARD, J. Controverse entre l'Abbé de l'Epée et Samuel Heinicke au sujet de la véritable manière d'instruire les sourds-muets, traduite du latin; et état actuel de la question. Paris: G. Pelluard. 1881. 8vo, pp. 71.

Mr. Alard gives us the first French translation, so far as we are aware, of the celebrated discussion on deaf-mute instruction carried on in Latin by the Abbé de l'Epée and Samuel Heinicke, which constitutes the third part of De l'Epée's *Véritable manière d'instruire les sourds et muets*, 1784. An English translation, published in 1801, was reprinted, with some corrections, in the *Annals*, vol. xii, pp. 87–128. At the present day it has, as Mr. Alard truly remarks, only an historical interest; but that interest is certainly sufficient to justify its presentation in the modern languages. The translator's work in this instance is faithfully and successfully performed. We only regret that in transcribing from De l'Epée the extract from the *Deutsches Museum* he has not only left uncorrected several of the typographical errors of the edition of 1784, but has admitted blunders even worse than those, and at this day less excusable, as

vorneheaste for *vornehmste*, *legden* for *beiden*, *abschnu* for *absehen*, *ernevaatung* for *erwartung*, etc., etc.

Mr. Alard adds a chapter of his own on "the present state of the question." He regards the oral method of instruction as the best where it is practicable, and believes that it is practicable with the majority of deaf-mutes; but he declares that there are now, as there always have been and always will be, a comparatively small number who cannot derive the least benefit from that method. In this he says he does not disagree with the Italian teachers, for "they send to the *hospice* the children who, without being idiots, do not show sufficient aptness to be retained in the schools where the pure oral method is rigorously practised. These children receive from a special teacher, by the aid of signs, an instruction adapted to their degree of intelligence." This statement, however, is contrary to that of Padre Marchiò, who asserted, in his reply to Dr. Gallaudet, that "in the Italian schools there is no selection, but all are received whom Providence sends."

Mr. Alard does not think that, even where the "pure oral" method is practised, the sign-language can or ought to be entirely suppressed during the first two years of the pupil's residence in the institution; and in the course of instruction he would make use, in addition to the processes recommended by the Milan Convention, of drawing and of dactylology.

ARNOLD, THOMAS. A Method of Teaching the Deaf and Dumb Speech, Lip-Reading, and Language. London: Smith, Elder & Co. 1881. 4to, pp. 156.

We mentioned the publication of this important work in the last number of the *Annals*, though we had not at that time seen the work. Since then the copy sent us by Mr. Farrar has come to hand, and we have referred it to a competent instructor by the oral method, who promises a review of it for the next number.

CLAVEAU, O. De la parole comme objet et comme moyen d'enseignement dans les institutions de sourds-muets. Rapport a M. le ministre de l'Intérieur. Paris: 1881. 8vo.

In 1880, Mr. Claveau, Inspector-General of the Benevolent Institutions of France, was directed by his Government to visit foreign schools for the deaf and dumb, and report on their methods, especially with respect to articulation teaching. He

accordingly visited institutions in Germany, Belgium, Holland, Switzerland, and Italy, and reported, as the result of his observations, that the instruction given to deaf-mutes by the simultaneous use of written and spoken language might lead in many cases to valuable results, on condition that teachers forced themselves constantly to practise oral communication with their pupils, and that the number of children under the charge of a single instructor should not exceed twelve or fifteen. He advised that the oral method be faithfully tried with the younger pupils of the National Institutions of France, with the view of determining definitely what proportion of deaf-mutes were capable of profiting by that method, and that in case of entire success it should be gradually adopted for all the pupils. It is in accordance with this recommendation, which was seconded by the Milan Convention, that the National Institutions of Paris and Bordeaux have adopted the oral method for their new pupils, while still instructing the older pupils by the manual and combined methods. We learn from the addresses at the annual distribution of prizes in those Institutions, which took place in August last, that the results of oral instruction thus far seem very satisfactory.

GALLAUDET, EDWARD M., Ph. D., LL. D. How shall the Deaf be Educated? (Article in the International Review for December, 1881. New York: A. S. Barnes & Co.)

In this paper Dr. Gallaudet makes a more careful and thorough classification of the deaf than we have seen elsewhere. "The *class* should always be spoken of as *the deaf*. The term *deaf-mute* should only be applied to such as are totally deaf and completely dumb. Besides this sub-class we should then have the *speaking-deaf*, the *semi-speaking deaf*, the *speaking-semi-deaf*, the *mute-semi-deaf*, the *hearing-mute*, the *hearing-semi-mute*; these last two classes being usually persons of feeble mental power." Dr. Gallaudet does not propose to arrange a special and distinct method of instruction for each of these sub-classes; but he maintains that with a class presenting such essential differences no single method can be expected to be successful.

For the instruction of the *speaking-deaf*, the *semi-speaking-deaf*, the *speaking-semi-deaf*, and a portion of the other sub-classes, Dr. Gallaudet advocates the use of speech and lip-reading to the greatest possible extent. But there are many *deaf-*

mutes with whom *success* in articulation is impossible; for them it is the wise course to forego all effort to impart speech, and to give them education through the use of signs, the manual alphabet, and writing. Deaf-mutes thus educated, Dr. Gallaudet earnestly protests, are not to be regarded as inferior, nor more to be pitied than those who learn to speak. Experience has abundantly shown that they may lead useful and happy lives, and mingle readily and freely in the society of hearing people. They even have some advantages over those who have been taught to speak; for their manual alphabet is a more certain, comprehensive, and satisfactory means of communication than the deaf person's imperfect articulation and lip-reading; their lack of speech gives them an additional hold on the sympathies of others; their graceful movements are attractive and interesting, while the speech of the deaf is often repellent and sometimes distressing; and their sign-language, highly developed and freely used, is a valuable aid in mental development and a source of great enjoyment.

Dr. Gallaudet's answer to the question chosen as the title of his paper may be summed up as follows: In all cases where success seems probable attempts should be made to teach the deaf to speak; where it is practicable, special schools for oral teaching should be maintained; in all institutions for the education of the deaf articulation should receive attention; the manual alphabet should be used in all schools for the deaf; signs should be made use of even in oral schools, especially with advanced pupils, as a means of conveying instruction in the form of lectures; and only well trained teachers, who possess a natural fitness for the work, should be employed in any school.

The paper is thoughtful and timely, and while some readers may dissent from certain of its conclusions,—as we do, for instance, with respect to the desirableness of introducing the manual alphabet and the sign-language into oral schools, believing that oral teaching cannot reach its highest success where means of communication so much more facile are placed in the pupil's hands,—yet those who differ with it most widely must admit the force and cogency of its arguments as well as the candor and courtesy with which they are presented. They must admit, too, that the many intelligent teachers who, like Dr. Gallaudet, refuse to accept the oral method as the best and only means of instruction for all the deaf, have some reasons for their refusal other than ignorance, prejudice, and bigotry.

LOGAN, JAMES H. The Raindrop. A Monthly Miscellany of Entertaining Reading for Young People. Turtle Creek, Pa. 1880. Square 8vo, pp. 384.

Mr. Logan, who published this admirable magazine for a year at considerable pecuniary loss, now offers for sale the complete volume, bound in handsome style. We expressed our opinion of the high value of the magazine while it was in course of publication, and we can now commend the bound volume as the best reading book for deaf-mute youth with which we are acquainted. We have also found hearing children greatly interested in it, and—owing probably to its large type and simple style, as well as the intrinsic value of the world's great stories of which it is chiefly composed—more fond of reading it for themselves than any other book. Mr. Logan, whose address is 142 Penn avenue, Pittsburgh, Pa., offers to send the bound volume by mail to any address, post free, for $1.65.

MALLERY, COL. GARRICK. The Gesture Speech of Man. Salem. 1881. 8vo, pp. 33

This valuable contribution to the study of the sign-language is an address read by Col. Mallery, U. S. A., (Chairman of the Sub-Section of Anthropology,) before the American Association for the Advancement of Science, at Cincinnati, in August last. As it contains much interesting information concerning the development of the sign-language which has not appeared in the *Annals*, we have sought and obtained the author's permission to reprint it entire in the next number.

REPORT of the Conference of the Governing Bodies of Institutions for the Education of the Deaf, held March 17 and 18, 1881; with an Appendix containing the Memorial to Her Majesty's Government and Report of the Interview with the Vice-President of H. M.'s Privy Council, Right Hon. A. J. Mundella, M. P. London: W. H. Allen & Co. 1881. 8vo, pp. 87.

We mentioned this Conference in the last number of the *Annals*, basing our notice of it, as the report was not at that time published, upon information furnished by one of the secretaries. Mr. James Howard, Head-master of the Yorkshire Institution, in a letter to the editor of the *Annals*, writes as follows of the character and proceedings of the Conference:

"In the number of the *Annals* for October you mention the 'Conference of Govering Bodies,' held in London in April last. With your permission I desire to give one or two facts, which, in my opinion, go to show that there was a striking similarity between that Conference and the 'International Congress' held

at Milan, as described by Dr. Gallaudet in a former number of the *Annals.*

"Head-masters (the practical advisers of committees) were rigidly excluded, as will be seen by the following extract of the second circular issued by the Ealing 'Society for Training Teachers of the Deaf and Diffusion of the "German System" in the United Kingdom,' which invited the Conference to meet: 'Only members of Governing Bodies of Institutions can be present at the Conference on the 17th instant. Head-masters or teachers can only be present if, as certainly happens in one case,* they are members of the Governing Body of any other Institution than their own.' As the Committee of this Institution were quite unbiased in favor of any particular system, and anxious to adopt any practical scheme for the benefit of the deaf, the Secretary telegraphed to the Secretary of the Ealing Society, the day before the opening of the Conference, thus: 'Committee beg to ask if head-master accompanying deputation may attend the Conference as spectator or otherwise. Reply paid for;' to which he received answer: 'Conference for members of committees only. Head-masters and teachers inadmissible. Our own head-master cannot be present.' In the face of this, to the great surprise of those members of the Conference who were not in the secret, the proceedings opened with a paper by Mr. Kinsey, Head-master of the Ealing Training College—the able and well known advocate of oral teaching—while no other paper on any other method was either solicited or permitted.

"There can be no doubt whatever that, but for the restriction imposed upon the practical teachers of the country, British Institutions would have been much more fully represented.

"Of the 32 members of the Conference present, only 11 were from the provincial institutions, and only 6 of these sent representatives. The remaining 21 members were ladies and gentlemen pledged to the 'pure oral' method, no less than 13 of these being on the directorate of the Ealing Training College, so that there was little chance of any opinion, save that of Ealing, receiving a favorable vote.

"More than one gentleman returned from the Conference con-

*I presume this to be Miss Hull, who is a member of the Ealing Committee.

vinced that it had been convened, not so much to *confer* as simply to ratify, *nolens volens*, the Milan resolutions.

"I may add further that the speeches of the dissentient minority were most unsatisfactorily reported.

"Whilst I am myself a strong advocate of oral instruction for the deaf, I consider it the first duty of all conferences, whose aim is to benefit these afflicted ones, to endeavor to arrive at practical suggestions which shall be thoroughly applicable to the mass of children who are sent to our schools. This can only be accomplished by free and open discussion."

REPORTS OF INSTITUTIONS (published in 1880.) Cambrian, Oregon, Western New York.

——— (published in 1881.) Clarke, Groningen, Llandaff, New York Improved Instruction.

(For the following notice we are indebted to Mr. J. HUGENTOBLER, of Lyons, France:)

GUDE, DR. W. Die Gesetze der Physiologie und Psychologie ueber Entstehung der Bewegungen und der Artikulations-Unterricht der Taubstummen. [The Physiological and Psychological Laws of the Origin of Movements and of the Instruction of Deaf-Mutes in Articulation.] Leipzig: W. Englemann. 1880. pp. 80.

We have just finished the attentive reading of this little volume, which well deserves to be known by the physiologist as well as by the instructor of deaf-mutes. It is the thorough and profound work of a learned man, based upon long experience in instruction. To analyze it is not an easy task. To be well understood it must be read through again and again. It is rigidly logical, the result of long years of patient observations made at the dissecting-table, scalpel in hand, as well as in the school-room in the presence of deaf-mute children.

This work, which we warmly recommend to all our colleagues who desire thoroughly to understand the physiological and psychological laws governing the action of speech, and to base the teaching of articulation upon exact scientific principles, is divided into three parts, viz., (1) The laws of nervous activity and of movement in general; (2) Proof that in the education of deaf-mutes these laws have hitherto found an unscientific application, which if made scientific will lead us to more satisfactory results; (3) Further evidence that a knowledge of the laws of nervous activity is profitable to the instruction of deaf-mutes.

INSTITUTION ITEMS.

BY THE EDITOR.

Pennsylvania Institution.—Mr. J. M. Pratt has resigned the position of teacher to take charge of a farm inherited from his father.

Only one additional school has yet been established by the Board of Directors. It is under the charge of Miss Emma Garrett, and is on the southeast corner of 17th and Chestnut streets. The oral method is employed.

Ohio Institution.—Miss M. A. Byers and Mrs. Ida W. Kessler having been forced to resign the position of teacher, temporarily at least, on account of ill health, the vacancies have been filled by the appointment of Mr. A. H. Schory, a graduate of the Institution and of the National College, and Miss H. Coggeshall, a hearing and speaking lady.

Wisconsin Institution.—Mr. Swiler writes: "The corps of teachers, though smaller than last year, is not discouraged, but goes to work with great enthusiasm and entire fidelity. Owing to circumstances the manner of teaching articulation has been somewhat modified. The same time is spent upon articulation as last year, but the number to whom oral instruction is given has been reduced, and the audiphone laid on the shelf.

"Miss R. C. Ritsher, whose resignation was reported in the summer, has yielded to the solicitation of friends and pupils and is in the Institution again in charge of a speaking class."

Iowa Institution.—Mr. James Simpson has resigned the position of teacher and gone to Dacota to take charge of the educational department of the Institution recently established at Sioux Falls. Miss Virginia Cowden, a graduate of the Illinois Institution, has been added to the corps of instruction.

One feature of the *Deaf-Mute Hawk-Eye* which gives us much pleasure is its excellent quarterly summary of the articles published in the *Annals*. Of course we should be gratified if we were able to reach directly all the parents and friends of our institution pupils who are interested in the methods of their education; but as that cannot be, we are very glad to have the

substance of our papers communicated to some of them in so satisfactory a manner.

Texas Asylum.—Mr. R. H. Kinney, who is at the head of the educational department of this Institution, writes as follows in the Ohio *Vis-a-Vis* of its grounds and buildings:

"The State owns fifty-seven acres of land, beautifully situated, and covered with a great variety of forest trees, on which the Institution is located. The spot is a healthy one, being six hundred feet above the level of the sea, above malaria, and out of the way of yellow fever. It is a mile from Austin, upon the opposite side of the Colorado river. The river is spanned by a good bridge, but, to avoid paying toll when the water is low, teams generally cross by a ford.

"The main building of the Institution was finished last vacation, at an expense of $4,500, plastered, wainscoted, and painted, with three large galleries, and two flights of stairs in the rear; the same number of galleries in front, and two fine towers, one on each end of the building. There are twelve large rooms, of about equal size, and a wide hall. Two of these, on the lower floor, are used as parlor and office; and the other two are private rooms for the superintendent and his family. The four rooms on the next floor are school-rooms, and for size, beauty of finish, and excellent arrangement, are equal to those of the the best institutions in the country. The rooms on the third floor are used as dormitories by the boys and two of the mute teachers. On one side, in the rear, is a frame building, used as chapel, two school-rooms, and sleeping room above. On the other side is the dining-room, girls' dormitory, and kitchen. The laundry is a separate building, and as wood is used altogether for fuel, there is also a small house for an engine and circular-saw."

California Institution.—A class in articulation has been established. It is taught by Miss Handy, formerly a teacher in the New York Institution.

New York Institution for Improved Instruction.—The new building, of which Mr. Greenberger promises us a description for a future number of the *Annals*, was formally dedicated on the 29th of November last. Addresses were made by Mr. O. S. Straus and Judge Shea, of the Board of Trustees; Mr. Neil Gilmour, State Superintendent of Public Instruction; Mr. Alexander Lawrence, the Rev. Dr. Thos. Gallaudet, and Mr. Isaac Rosenfeld, President of the Board. Mr. Greenberger gave an illustration of the method of teaching with pupils of the highest and lowest classes.

Arkansas Institute.—The trade of printing has been introduced, and the publication of a neatly-printed and well-edited little paper has been begun. The paper is called the *Deaf-Mute Optic*, and appears weekly.

Nebraska Institute.—Miss Eddy resigned her position as teacher at the close of the last term. Miss Fannie Henderson and Miss Effie Johnston, of Jacksonville, Ill., have been engaged as teachers. Both are experienced teachers, but new to the work of deaf-mute instruction.

Miss M. J. Farrant, of Salem, Mass., a graduate of the Boston School of Vocal Physiology, has been appointed articulation teacher.

An eight-horse power engine and five machines have been placed in the work shops. A gas machine (150 light) has been put in, and gives good satisfaction. A new steam-heating apparatus, low pressure, has been introduced, and the buildings are now heated by steam.

The new building provided for by the last legislature is in process of erection, but will not be ready for use till next term.

Lyons Oral School.—This school, under the direction of Mr. Hugentobler, having taken part in the exhibition organized at Lyons on the occasion of the recent National Geographical Convention, has been awarded a silver medal by the jury of the Convention.

MISCELLANEOUS.

BY THE EDITOR.

Relation of Religion, Consanguinity, and Social Position to Deaf-Mutism.—We find the following paragraph in several of the recent deaf-mute papers:

"Professor Hutchinson has, in one of his lectures, mentioned a very interesting fact ascertained in Berlin. Among Roman Catholics, who prohibit marriages between persons who are near blood relatives, the proportion of deaf-mutes is 1 in 3,000; among Protestants, who view such marriages as permissible, the proportion is 1 in 2,000; while among Jews, who encourage intermarriage with blood relations, the deaf-mutes are as 1 in 400."

Similar statistics, but giving the figures more precisely, were

published several years ago with respect to deaf-mutism in Paris. In mentioning them in the *Annals* (vol. xviii, page 206) we called attention to the fact that in Nassau the relative numbers of Catholics and Protestants were reversed, the proportion of deaf-mutes among the Protestants being one in 2,638, and among the Catholics one in 1,869. We also quoted from the German *Organ* the suggestion that these differences are to be accounted for, not by religious distinctions, nor by consanguinity, but by the social position of the parents, inasmuch as a large proportion of the deaf-mute children of the poorest class die before reaching an age to be included in the census. We may add that the authority for statistics should always be carefully inquired into before basing conclusions upon them. Those above quoted are, we suspect, derived from the more exact statistics formerly given for Paris; we know nothing of the trustworthiness of the authority in either case.

Aids to Hearing.—At a meeting of the Medical Society of New York, held June 26, 1881, Dr. Samuel Sexton, aural surgeon to the New York Eye and Ear Infirmary, read a paper on Dental Sound Transmission, and presented to the Society several Japanese "otacoustic fans," which resemble the audiphone somewhat in shape, but are made of material better adapted, according to Dr. Sexton, to convey sound. They are also more durable, as well as much cheaper. They range in price from thirty-three cents to three dollars, the cheapest being the best. Dr. Sexton thinks that when properly employed they are more useful in many cases of deafness than any of the other similar devices offered to the public. They have for our readers the additional interest of being manufactured by the pupils of the Institution for the Deaf and Dumb at Tokio, Japan.

Dr. Sexton himself has invented a convenient dental sound-transmitter. It is small enough to be carried in the pocket, and can be attached to almost any fan. It is made by Mr. Ford, of Caswell, Hazard & Co., New York.

The conclusions reached by Dr. Sexton as to the value of dental sound-transmission are as follows:

"Dental transmission of sound, for conversational purposes, is of very considerable advantage to a large number of very deaf individuals. Its inconspicuousness gives it a decided advantage over the trumpet.

"In most instances it does not convey as great a volume of

sound to the ear as the trumpet, but, notwithstanding this fact, most patients prefer the fan. By either method general conversation cannot be well heard, the patient being compelled to confine his attention to one speaker at a time.

"In adopting dental transmission as an aid to the impaired sense of hearing, the assistance of some one competent to give instructions respecting the best method of using the fan should be obtained.

"And, finally, only the limited amount of assistance should be promised which experience has shown to be practicable."

The Italian Method.—Professor Vaïsse, formerly Director of the National Institution at Paris, has recently published in the teachers' supplement to *Le Conseiller Messager* an interesting series of articles on "The Italian Method," which he regards as sufficiently different from the articulation method as practised in Germany and elsewhere to warrant that title. After some introductory remarks upon the French and German methods, he says:

"In Italy the work of deaf-mute instruction dates, as a definite institution, from the early years of this century, and the first application of it was made upon principles similar to those of the French method. Our brethren beyond the Alps, however, impressed upon the development which they gave to the work a certain character of originality, and successively introduced into the practice of their primitive method modifications more and more important. These modifications ten years ago developed into an actual transformation of the method of instruction, and, though the result was a system analogous to Heinicke's, it is allowable to say that, in this labor of transformation, their present mode of instruction, which they call the *pure oral intuitive*, has established itself in a manner sufficiently independent, as is shown by their publications since 1870, to justify to-day the appellation of *Italian method*."

Mr. Vaïsse then proceeds to show what the peculiarities of the Italian method are. A similar service, but going more fully into the details of instruction, was rendered the readers of the *Annals* by Mr. Greenberger last year, (vol. xxvi, pp. 50–56 and 112–126.)

Mr. De Rossi and the Italian Schools.—In the last number of the *Annals* we referred to the assertion by Professor De Rossi, a member of the Commission on Deaf-Mute Education appointed by the Italian government, that after seven or eight years of schooling Italian deaf-mute youths of sixteen years of

age have an intellectual development not superior to that of a hearing child seven or eight years of age, and to his startling suggestion that the public funds could be more profitably employed in curing deafness than in educating the deaf. In the November number of the Italian periodical, *Dell' Educazione*, etc., Padre Marchiò courteously explains to us that Mr. De Rossi's remarks had not escaped the notice of the conductors of that periodical, though for satisfactory reasons they had deemed it best not to criticise him by name; but that it was he and others of his kind whom Padre Marchiò had in mind in his trenchant article "On Some Exaggerations in the Name of Science," published in the June number. Since, however, the objectionable paragraph has crossed the Atlantic and been made the subject of comment in the *Annals*, Padre Marchiò now does not hesitate to contradict directly and positively Mr. De Rossi's assertion concerning the results of deaf-mute education in Italy. He says that in the few hours that gentleman passed in the Siena Institution he had not time to become in the least acquainted with the condition of its pupils, and that if he had inquired of any Italian teacher of deaf-mutes whatever he could have learned something not to be found in his works on physiology, anatomy, and medicine. Padre Marchiò suggests for his consideration the proverb *Ne sutor ultra crepidam*, and states, as a matter of fact, that the course of instruction in the deaf-mute institutions of Italy comprises all the subjects of the fourth year of hearing schools. He confirms us in our fear that Mr. De Rossi's claims in behalf of the results of medical skill in the curing of deafness were wild exaggerations, and calls attention to the fact that in Germany, the country where diseases of the ear have received the most careful and thorough study, schools for the education of the deaf are still most numerous.

We gladly accept Padre Marchiò's statements and explanations as a complete refutation of Mr. De Rossi's disparaging assertions concerning the Italian schools; assertions, we may add, that we should not have deemed worthy of notice in the *Annals*, had it not been that their author holds the official position above mentioned, that he had just come from Siena, and that his remarks were received without contradiction or objection by the learned body to whom they were addressed, and, so far as we had observed, by our esteemed friends of the Italian periodical. For our part, while we rejoice heartily in all that medical

science has thus far done for the relief of the deaf, and trust that it may accomplish much more in the future, we deem the present generation of deaf-mute children in Italy happy in still being under the care of "priests and pedagogues," rather than left to the tender mercies of such would-be reformers as Mr. De Rossi.

First Conference of Church Workers Among Deaf-Mutes.—This Conference was held in St. Ann's Church, New York, on the 6th and 7th of October, 1881. Dr. Thos. Gallaudet was elected President. Papers by Dr. Gallaudet on the work of the Church for deaf-mutes in the United States, by Mr. Syle on the similar work in Great Britain, and by Dr. Clerc on the Dignity and Religious Development of the Language of Pantomime were read and discussed. On the subject last named Dr. I. L. Peet spoke at some length. Mr. Mann presented details of his labors in the West, and Mr. Job Turner gave some reminiscences of his travels in the South. An address was made by the Rev. Dr. Twing, Secretary of the General Board of Missions of the P. E. Church. After the conference Mr. Syle addressed a public meeting of deaf-mutes on the subject of "guilds," or religious societies of the deaf, relating the history of that in Philadelphia, and offering some suggestions for similar societies elsewhere. Mr. John Carlin also spoke on this subject.

The Garfield Memorial.—Dr. Gallaudet, in his sketch of President Garfield's connection with the Deaf-Mute College, published in this number of the *Annals*, speaks of a movement to erect on the premises of the College some memorial of General Garfield's services to the higher education of the deaf. It has been decided that the memorial shall take the form of a marble bust, which will probably be made by Mr. D. C. French, of Concord, Mass. Mr. French's "Minute Man," exhibited at the Philadelphia Centennial Exhibition, and his more recent bust of Emerson, which has received unqualified praise from the best critics, as well as his other works, afford sufficient evidence of his fitness for the task. The entire cost will be about $1,200, which it is expected deaf-mutes and their friends will be glad to subscribe. Subscriptions may be addressed to Prof. A. G. Draper, of the College Faculty, who has been elected treasurer of the fund.

[Continued from page 7 of advertising]

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